AN

EXAMINATION

OF THE

DOCTRINES OF VALUE,

AS SET FORTH BY

ADAM SMITH, RICARDO, M'CULLOCH,
MILL, THE AUTHOR OF "A CRITICAL DISSERTATION," &c.
TORRENS, MALTHUS, SAY, &c. &c.

BEING

A REPLY

TO THOSE DISTINGUISHED AUTHORS,

BY

CHARLES FORSTER COTTERILL.

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PREFACE.

IN differing from some of the most distinguished economists of the past and present day respecting the law which determines value in exchange, I have not been unsusceptible of diffidence* in laying my view of the subject before the tribunal of public opinion. This diffidence of feeling, however, has not prevented me from stating my principles, nor from "commenting with that freedom which the interests of science require" on such parts of the works of economists as were at variance with my own opinions, and which I considered as obstacles in the pursuit of truth. How far I have been successful in removing old impediments, or avoiding the substitution of any additional, the reader will best judge. It will, however, afford me considerable pleasure, if the prediction of Colonel Torrens respecting the probable union of economists on this subject, be shortly fulfilled; as the laws which affect the distribution of wealth can never be generally or clearly known until this anticipated union is accomplished.

* Especially as the MS. originally intended for publication, and submitted for perusal to a gentleman, has been unfortunately mislaid by him. The following pages therefore were hastily re-composed, in the midst of other and most pressing engagements, from such *memoranda* as were preserved

With respect to the controversial character of the following pages, I can only say it was unavoidable in consequence of my theory involving positive differences from other economists; but respecting the form of it, I must be permitted to give some explanation. It is allowed that the division of Mr. Ricardo's chapter on value admits of considerable improvement. In following therefore his arrangement, I have necessarily participated in his defect; this, however, appeared to me more than balanced by the advantage it afforded me of following him step by step, and of very particularly and minutely scrutinizing his opinions. I have, therefore, divided my work into the same number of sections which I find in Mr. Ricardo's chapter on value; and by making his doctrines in each the text of my remarks, I have, at the same time, been enabled more conveniently to investigate the opinions of other economists, both such as have attached themselves to the Ricardo school and such as are opposed to it. In the investigation, brevity (so far as was consistent with perspicuity) has been a principal object; though the intricacy of the subject not only admits but requires more copious illustrations than many subjects which are less abstract. In consequence of the form selected, it will be seen that various arguments and principles have been unavoidably repeated.

The most important features in the following pages appear to me to consist in shewing the

efficient and determining cause of value—the effect of alterations in wages on value under different proportions of fixed and circulating capital, &c.—the conditions necessary to a standard of value—and in confuting, as I conceive, the erroneous doctrine that the supposition of such a standard involves contradictory conditions. I am far from supposing that every opinion disclosed is free from error or objection; the subject, however, I trust, will not suffer under my criticism. On the contrary, I hope it may be found I have acted as a pioneer, rather than an obstructer of the way on which subsequent adventurers may desire to travel.

It is scarcely necessary to say that political economy is a very useful and important science; that which explains the phenomena of the production, distribution, and consumption of wealth, can only be thought useless and unimportant by the ignorant and prejudiced. While the world is much indebted to the astronomer for his discovery of distant orbs, and to the chemist for some important analytical processes, society is much more indebted to that science which discloses the hidden causes of wealth, thus furnishing the fund from which scientific and literary men draw their encouragement and subsistence. Were the laws of wealth more generally studied, those ebbs and flows of commerce, and those violent convulsions which shake society to its base, would, if not entirely prevented, at least be modified in

SECTION I

THE doctrine set forth by Mr. Ricardo in his first section is both original* and profound. It is original in assigning quantity of labour as the cause of value (though an erroneous cause, as others have proved, and as I shall afterwards shew;) and profound in combating the doctrine propounded by Dr. Adam Smith, that the price given to the labourer is the cause of value in exchange. However much this part of Mr. Ricardo's argument may be admired, and however much we may applaud the dexterity by which the opinion of Dr. Smith on this subject is confuted, the theory itself which this profound writer substituted, will, I think, be shewn destitute of foundation, notwithstanding it is consecrated by the approbation of men of no mean attainments in economical science. Unfortunately for political economy, Mr. Ricardo's extreme deficiency in analytical subtlety has engendered in all his writings very important and very radical errors.

That the subject may have an ample examination, I shall first give an epitome of the doctrines divulged hy Mr. Ricardo in this his first

* Sir William Petty, in Charles the Second's Reign, stated quantity of labour to be the ground or cause of value; but as he was evidently not aware of all the consequences of his theory, we must concede to Mr. Ricardo the merit of originality.

section; I shall then offer my criticisms upon them, and assign what appears to me, after an anxious examination, the true principles which determine exchangeable value. I shall afterwards examine the opinions of some of our most eminent economists, particularly those of Mr. M'Culloch, the Professor of Political Economy in the University of London. And in the prosecution of this enquiry, I not only ask the patience, but the candour of my reader, and also his forbearance.

Mr. Ricardo commences by a quotation from Adam Smith, shewing the distinction between value in use and value in exchange. He observes, "Water and air are abundantly useful; they are, indeed, indispensable to existence; yet, under ordinary circumstances, nothing can be obtained in exchange for them." "Utility then," he says, "is not the measure of exchangeable value, although it is absolutely essential to it." He proceeds to state, that commodities possessing utility derive their value from two sources—from their scarcity, and from the quantity of labour necessary to their production. The former he considers as forming a very inconsiderable part of the mass of commodities, and in speaking therefore of the exchangeable value of commodities, he means those only "on the production of which competition operates without restraint." He then proceeds with various quotations from the work of Smith, shewing that in that "rude

state of society which precedes both the accumulation of stock and the appropriation of land, the proportion between the quantities of labour necessary for acquiring different objects seems to be the only circumstance which can afford any rule for exchanging them for one another." Afterwards he impugns the erratic genius of this great economist, and charges him with creating another standard measure of value, sometimes in corn, and sometimes in the purchasing power of labour, after having consistently defined the original source of value. He then attempts to prove that Smith, in ejecting gold and silver as his standard, had himself, by fixing on corn and labour, chosen media no less variable. Gold and silver, Ricardo very truly affirms, are subject to great fluctuations from the discovery of fresh mines, from improvements in working them, and from their exhaustion after yielding a supply to the world for a succession of ages. But from which of these variations he cogently asks are corn and labour exempt? He then observes, that "In the same country double the quantity of labour may be required to produce a given quantity of food and necessaries at one time that may be necessary at another and a distant time; yet the labourer's reward may possibly be very little diminished. If the labourer's wages at the former period were a certain quantity of food and necessaries, he probably could not have subsisted if that quantity

had been reduced. Food and necessaries in this case will have risen one hundred per cent. if estimated by the *quantity* of labour necessary to their production, while they will scarcely have increased in value, if measured by the quantity of labour for which they will *exchange*." And he then proceeds to remark respecting the food and clothing of the labourer, that in case improvements in machinery should lower their cost, and consequently their value, "we should find him probably at the end of a few years in possession of only a small, if any addition to his enjoyments." "It cannot then be correct to say with Adam Smith," "*that as labour may sometimes purchase a greater, and sometimes a smaller quantity of goods, it is their value which varies, not that of the labour which purchases them.*" "But correct as Adam Smith had previously said," "*that the proportion between the quantities of labour necessary for acquiring different objects seems to be the only circumstance which can afford any rule for exchanging them for one another.*" Two commodities, gold and labour for instance, fall in exchangeable value in reference to the mass of commodities; upon investigation we find that the discovery of new and more fertile mines has lowered the cost of producing gold, and that, in consequence of an abundant supply, or the increased facility of producing corn, &c. labour had fallen to other things. It would, says Mr. Ricardo, "be correct for me to say, that corn and necessaries

had fallen in value in consequence of less quantity of labour being necessary to produce them, and that this facility of providing for the support of the labourer had been followed by a fall in the value of labour." No, say Adam Smith and Mr. Malthus, with regard to gold you were correct; but corn and labour are our standard; it would therefore be highly improper to say they had varied—"the correct language will be to say, that corn and labour have remained stationary, and all other things have risen in value" Against this language Mr. Ricardo protests, because he finds in the case of gold and corn that a less quantity of labour is necessary to produce them, he considers they have fallen, and not that other things have risen in value, and concludes by putting Smith in the following inextricable dilemma. "Suppose a labourer to be paid a bushel of corn for a week's work, when the price of corn is 80s. per quarter, and that he is paid a bushel and a quarter when the price falls to 40s. Suppose too that he consumes half a bushel of corn a week in his own family, and exchanges the remainder for other things, such as fuel, soap, candles, tea, sugar, salt, &c. &c.; if the three-fourths of a bushel which will remain to him, in one case, cannot procure him as much of the above commodities as half a bushel did in the other, which it will not, will labour have risen or fallen in value? Risen, Adam Smith must say, because his standard is corn, and the labourer receives

more corn for a week's labour. Fallen must the same A. Smith say, "because the value of a thing depends upon the power of purchasing other goods, which the possession of that object conveys," and labour has a less power of purchasing such other goods."

After this very brief synoptical statement of the doctrines disclosed by Mr. Ricardo in this section, I shall endeavour to try the truth of them by the test of analysis in three ways—

1st. By considering the negative part of his theory.

2dly. The positive part of it. And

3dly. By considering the comparative merits of the Smithian and Ricardian schemes.

First then with respect to the negative part of Mr. Ricardo's doctrine, that value is not caused by the purchasing power of labour, I may remark very briefly, that Ricardo successfully overthrew the erroneous notion of the great Scotch economist, that value was altered by an alteration in the wages of labour. It was a doctrine advanced by Adam Smith, and confirmed by every succeeding economist to the time of Ricardo, that the exchangeable value of all goods was raised by a rise of wages, and diminished by a fall. Ricardo proved this not only to be untrue, but that, on the contrary, those goods which had a preponderating share of fixed capital in their production, fell as wages rose, and rose as wages fell. This doctrine, paradoxical as it may appear, is supported by

the distinguished names of Malthus, M'Culloch, Mill, &c. and is true beyond all possibility of doubt as respects the fact of an inverse variation to wages, though the Author of the present work, as will afterwards be shewn, differs from all these writers as to the exact incidence of a rise and fall of wages on value under different proportions of fixed and circulating capital, and different rates of profit. That aggregate value is not encreased or diminished by a rise or fall of wages, Mill and M'Culloch have very clearly stated; but I feel well convinced Mr. Ricardo had not such clear views. It is, however, very evident, that as a rise or fall of wages merely affects the distribution of commodities, any alteration in it cannot alter aggregate value, because it does neither increase nor diminish the amount of commodities. These principles economists have very successfully stated. I therefore deem it useless to say further, but proceed,

Secondly, to consider the positive part of Mr. Ricardo's theory.

Value Mr. Ricardo very properly divides into two parts, viz. value in use and value in exchange. The former comprises all those gratuitous gifts of God's goodness, such as air, water, &c. which are spontaneously produced. The latter includes all commodities that require labour to produce them, and which possess "a power of purchasing other goods." The first then obviously does not come within the range

of political economy, and is only mentioned *in transitu* for the sake of perspicuity. It is consequently the last or value in exchange that Mr. Ricardo proceeds to investigate, and the cause of which he unequivocally states to be quantity of labour. Notwithstanding this doctrine has been confuted in the clearest manner by the Author of the "Dissertation on the Nature, Measures, and Causes of Value," I shall endeavour, as there are some Ricardians still remaining, to give it a further confutation, and various are the modes by which it may be accomplished. I shall confine myself to two, viz. in supposing all commodities increased in their producing labour, and only a part so increased. In the first place then we will assume three classes of capitalists, No. 1, 2, and 3, each class with a capital of 1000*l.* or what is the same thing, with wages sufficient for the maintenance of twenty men, each at 50*l.* per annum, and profits at 20*l.* per cent. The total capital will therefore be 3000*l.* and the total profit 600*l.* Now let us imagine, that from some cause or other the productiveness of capital or labour is generally depreciated, and that 1100*l.* is now necessary, or twenty-two men at the same wages as before, viz. 50*l.* to produce the amount of commodities which 1000*l.* or twenty men formerly produced. Is it not then evident, that the capitalists of class 1 will not obtain a larger value from class 2 and class 3 than they formerly obtained before the

diminished power of labour and capital? For if they should urge increased quantity of labour or capital as a reason for obtaining more of the commodities produced by the labour and capital of classes 2 and 3, will not these capitalists urge the same plea, and contend that they should have more of the commodities produced by the capital of class 1, instead of less, on account of the increased difficulty of producing their particular articles? It is therefore very plain, that all the goods produced from classes 1, 2, and 3, will exchange against each other in the former ratio; and that too notwithstanding an increase in the quantity of labour necessary to produce them. What then becomes of Mr. Ricardo's doctrine of value?

Again; we will suppose 3 classes of capitalists, as before, equally employing 1000*l.* each, or 20 men at wages of 50*l.* per annum per man, and instead of a decrease in the productiveness of industry in all the classes, we will assume it, in only one, say class 3. In this class then let us suppose 22 men necessary, each at 50*l.* per annum wages, to produce the same amount of goods which 20 men or 1000*l.* was only necessary before to produce, and that classes 1 and 2 still require their former quantity of labour. Here, then, will the followers of Mr. Ricardo be unbounded in their triumph, and exclaim with some assurance, "your very supposition proves the truth of Mr. Ricardo's doctrine that value is caused by quantity of labour, for with

regard to the commodities of class 8 you find their exchangeable value increased because the cause of value is increased." Most certainly the goods produced by the capital or labour of class 3 will be increased, if the producing labour of classes 2 and 3 have not equally increased; we suppose they have not, and consequently we find that commodities produced under the circumstances of class 3 have gained in exchangeable value. But we do not from thence conclude that quantity of labour is the cause of value, because we find upon comparing classes 1 and 2 with class 3 that they have fallen in exchangeable worth, which they never could have done if quantity of labour were the cause of value, as the quantity of their producing labour by the supposition has not altered. Quantity of labour, therefore, cannot be the cause why the various commodities of classes 1, 2, and 3, mutually exchange for each other. Mr. Ricardo had only one point of sight, he would look at classes 1 and 2 from class 3, where there had been an alteration in the producing labour. Had he inverted his view, and seen class 3 from either point, class 1, or class 2, he could never have propounded his doctrine with such uncompromising decision. Enamoured with his theory, he evidently, either through fear or negligence, omitted to view it at those varied points of sight which are necessary to try the stability of any system, and especially one which went to overthrow long established and

very deep rooted prejudices. To say the most of his theory, it is but a theory of ratios, and can never determine value. A. and B. he says, have the same value, because the quantity of labour necessary to produce A. is the same as the quantity necessary to produce B. But it does not follow from thence that quantity of labour is the cause of A. exchanging for B. or B. exchanging for A. any more than the desire of an individual to take a journey may be said to be the cause of his travelling. For it evidently is not merely the desire which constitutes the cause. Besides the disposition to go, there must be the necessary means of going, such as conveyances, roads, money, physical strength, &c. And though in popular language it may be correct to say, we travel because we desire to travel, in strict philosophical language it is highly incorrect to say so; as this is simply but one ingredient in the cause, whereas it is compounded of many ingredients. Just in this manner I conceive Mr. Ricardo's error to have arisen. Assuming A. and B. to exchange for each other, and discovering that the producing labour of A. was the same as the producing labour of B. he precipitately concluded that quantity of labour was the sole cause of their value; whereas it was only a moiety of the cause. The native strength of Mr. Ricardo's mind led him to reject A. Smith's cause of value, but unfortunately, the theory substituted is quite inadequate to satisfy the inquisi-

tive investigator of truth. It is, however, urged in extenuation of Mr. Ricardo by some of those who favour his view of the subject, that he used the term value designedly, sometimes in a techical sense as not meaning exchangeable power, but that he always indicated in the context in which sense he wished it to be understood. Mr. Ricardo, however, only acquaints the reader with two kinds of value, viz. value in use and value in exchange, and in combating Adam Smith, his arguments are worthless unless he used the term in the sense of exchangeable power. It is true, in his chapter on "Value and Riches," he avows two meanings; but this might have been expected, because being about the middle of his book, it would be a gross insult to his understanding to suppose he did not then see the great inconsistencies to which his doctrine led him. But whether he used the term value in one sense or two is now very immaterial, and would not in the least help him from a disagreeable dilemma. For in the event of his using the term in the sense of purchasing power it is most obvious that quantity of labour cannot be the determining cause, as we have before proved; and if he used the term designedly, in two senses it is absurd and contradictory. Because we want to know the *cause* of value, and Mr. Ricardo unequivocally stating quantity of labour, the objectors to this theory place it in such a critical situation that those friendly to it immediately step forward, and cry out "that

he used the term in a technical sense," and so think they vindicate their master, but they would really serve him better by an avowed hostility.

We will thirdly consider the comparative merits of the Smithian and Ricardian schemes.

However much the interesting science of political economy is indebted to Mr. Ricardo for some important truths, it remains to me a mystery, and is, I believe, an anomaly in the history of the science, that so sagacious and profound an investigator of truth should have been misled at the very threshold of his principle. The very ingenious author of the "Dissertation on the Nature, Measures, and Causes of Value," has objected to the very heading of this section, and his remarks appear just, for I am much mistaken if it is not a false antithesis, and if the two parts of the proposition are not the same in their result. Economists allow wages to be equal in all departments upon an average of years, in the same manner that they agree upon an equality of profits. If, therefore, wages are equal in all departments, shall we not as accurately acquire the value of a commodity by a knowledge of the wages consumed in its production as we shall by the quantity of labour employed to produce it? Here are A. and B. that mutually exchange for each other. Now what is the cause that A. exchanges for B.? The quantity of labour consumed in the production of A. Mr. Ricardo says. The price or

the wages of labour, on the contrary, Adam Smith says. Assuming afterwards that one A. exchanges for two B. Mr. Ricardo would contend that either there had been an increase in the producing labour of A. or a decrease in the producing labour of B. On the other hand it would be urged by Adam Smith that the wages to produce A. had either been increased, or the wages to produce B. decreased, and both these economists would propound pretty correct *criteria* of value, but the former would not have any superiority over the latter. For suppose that when A. and B. were first assumed to exchange for each other the labour of one man for one year at 50*l.* per annum, was necessary equally to produce A. and B. and that in consequence of great facilities in the production of B. one man at half a year, or 25*l.* was only necessary, Mr. Ricardo would then affirm it as very certain that quantity of labour was the cause of the specific value which A. and B. mutually possessed, because he would discover that B. was depreciated 50*l.* per cent. in its exchangeable value, just as its producing labour was diminished. But Adam Smith would perceive an equal coincidence with his theory, for he would find that the wages to produce B. were fallen directly as its value. We therefore see clearly that the value of any commodities at the same time may be as correctly estimated by Smith's as by Ricardo's rule. For if A. is known to be of equal value to B. because the

quantity of labour to produce A. is the same as the quantity to produce B. the value of A. in like manner is to B. as the value of the producing labour of A. is to the value of the producing labour of B. It may however be affirmed that Mr. Ricardo's is a superior mode of estimating value at different times. For were we to assume a universal rise of wages if value were estimated according to the rule laid down by A. Smith, goods would generally rise; whereas if quantity of labour be assigned as the cause, value would remain the same, though wages should ever so greatly vary. Thus Y. and Z. would not alter in their exchangeable value, if wages rose, quantity of labour being the rule; but should there be a general rise of wages of 10*l.* per cent. and value be estimated in them, all commodities would rise 10 per cent. which is absurd. Probably this view of the case may have misled Mr. Ricardo. It appeared very evident to him that an alteration in wages, which only affected the distribution of commodities, could not alter aggregate value, and tacitly assuming the productiveness of labour to continue stationary, he saw clearly that his doctrines were free from the objection which was very forcible against the Smithian Theory. The productiveness of labour however is undergoing continued and almost infinite changes, and therefore the law of value by Ricardo, like Smith's, was framed under the greatest misconception. But it may be observed that

quantity of labour will always cause an indefinite value: it will do so, because upon an average of trials it always produces a result. Did not experience furnish us with this fact there would evidently be an impropriety in saying thus much. Experience, however, does assure us that labour in the aggregate invariably produces something. Individual labour is frequently abortive. It is not, however, of individual labour we now speak, but of aggregate labour, and the aggregate mass of labour will invariably be productive; though individual labour may not be so invariably successful. We may, however, with equal propriety term the wages of labour an invariable cause of some value. It is true a servant may have received his wages, and from incapacity or unwillingness he may not have created any utility; but certainly the price of such misconduct would ultimately be an ejection from his master's employment. Masters would scarcely retain a person from whom they received no equivalent for what was advanced to him. If upon repeated trials it was discovered that the wages advanced to servants did not produce a result, their employment would clearly be discontinued, and it then could not with truth be said that wages of labour always produced a value. But as we find from experience that the wages advanced to servants upon an average *do* create an equivalent utility, it appears to me as correct to say that the price given to the labourer is always *a* cause of value,

as the quantity of labour is always a cause. They are both indefinite enough, but one, I imagine, not more so than another.

But, it will be asked, if Adam Smith is incorrect in stating corn and labour as the causes of value, and that all things fall or rise as they command less or more of these, and Ricardo incorrect in assigning quantity of labour as the cause, what may be correctly affirmed as the cause? The answer is simple enough, viz. cost of production. "Cost of production, why Mr. Ricardo says that himself." He does so, but in my opinion did not understand the meaning of the term, and frequently used it in different and contradictory senses. But we will examine into the import of Mr. Ricardo's cost, and see if there is any identity between it and quantity of labour, and if he were justified in using the terms indiscriminately. The term cost of production does not occur in the section we are now investigating, but appears very frequently in other parts of his work, and it is used indifferently with quantity of labour. Thus, if X. Y. Z. permanently exchanged for each other, Mr. Ricardo would say the quantity of labour in each was the same or the cost of their production; and if X. permanently fell in reference to Y. and Z. and he discovered that whilst there had been no alteration in their producing labour, the quantity of labour employed in the production of X. was diminished, he would say its cost had altered, at the same time that the

cost of Y. and Z. had continued as before. Now it is against this meaning of cost that I most decidedly protest. Indeed, Mr. Ricardo would have better maintained his consistency by allowing an alteration in the cost of Y. and Z.; because in controverting Smith he deprecates the idea of an alteration in the value of the precious metals in consequence of changes in the wages of labour. To be consistent, therefore, he must equally deprecate a change in their value in consequence of changes in the productiveness of labour. This change, however, would take place, assuming a fall in the value of X. without any corresponding rise elsewhere. We cannot therefore but suppose such a rise in Y. and Z. as would neutralize the fall in X. But a rise in the money value of Y. and Z. would, according to Mr. Ricardo's view, alter their cost, because he estimates cost in money. Here then would be an increase in the cost of producing Y. and Z. without any increase in their producing labour. Quantity of labour therefore, and what Mr. Ricardo calls cost of production, cannot be identical. But as this is important, we will exemplify it by an instance, and in order to do so, let us recur to a former illustration, and suppose the whole capital of the kingdom divided into three classes, Nos. 1, 2, and 3, in each of which 1000*l.* capital is embarked or twenty men employed, each man at 50*l.* wages per annum. We will suppose too profits 20*l.* per cent.; the total

product and money value will therefore be as under:—

CLASS I.	CLASS II.	CLASS III.	
£1000 Capital 200 Profits	£1000 Capital 200 Profits	£1000 Capital 200 Profits	Total Money Value } £3600
£1200 Money Value	£1200 Money Value	£1200 Money Value	
1200 Product Val.	1200 Product Val.	1200 Product Val.	Total Product Value } 3600

Class 1 we may assume to produce necessaries, class 2 conveniences, class 3 luxuries. Now Mr. Ricardo would say 1200l. represented the cost of all the three separate classes, and he would say truly, for every reasonable man would, I believe, say the same. £1200 then would be the natural price of the necessaries, the conveniences, and the luxuries of human life. As far, therefore, as this goes, we all agree; but we shall very soon materially disagree. To exhibit this difference of opinion, let us further suppose a 30 per cent. increase in the productions from the capital of class 3, or that commodities before represented by 1200 are now increased to 1500, what will Mr. Ricardo then say is the total money value of commodities produced by the capital of class 3? The same as before, viz. 1200*l.* because the quantity of labour remains the same, and, according to his view, the cost also; and assuming money to be his invariable standard, 1200*l.* would be the exact expression of their value. This I consider to be the incipient cause of all Mr. Ricardo's errors. He assumed money to be invariable in its value, and considered quantity of labour to be the cause of value: therefore if

commodities which formerly took 50 men to produce them now only take 25 men, they would exactly fall to half their former price. But this evidently invalidates money from being a perfect standard; the very supposition destroys its integrity, for it no longer bears the same relation to all commodities, as it evidently must do in order to constitute it an invariable standard.* Supposing by improvements in machinery, the quantity of labour to produce commodities is generally diminished, what would be the consequence? Not an equivalent fall, as stated by Mr. Ricardo, for that would suppose the precious metals to be very unequally distributed over the Globe, which he would be the first to deny, as money he states, like every other commodity, will flow to the best market. Therefore imagining a great reduction in the quantity of labour to produce commodities here, a great influx of the precious metals would certainly follow, and quickly restore the level of prices. Consequently instead of an equivalent fall in class 3 to the amount of the decrease in the quantity of labour, and classes 1 and 2 remaining at their former money value, the exact effect of such an alteration in production on price would be as underneath:—

CLASS I.	CLASS II.	CLASS III.	
£1000 Capital	£1000 Capital	£1000 Capital	
300 Profit	300 Profit	500 Profit	Total Money Value } £3900
£1300 Money Value	£1300 Money Value	£1300 Money Value	
1200 Product Val.	1200 Product Val.	1500 Product Val.	Total Product Value } 3900

* The conditions necessary to a measure of value are here assumed for the sake of the argument, but they will afterwards be proved in Section 6.

Thus we find that, instead of the 1500 products selling for 1200*l.* as Mr. Ricardo would state, they will sell for 1300*l.*, and instead of the 1200 products of classes 1 and 2 having the same money value as before, in consequence of the alteration in class 3 they have an increased value, viz. 1300*l.* though neither the capital nor the quantity of labour employed in their production is increased. In the first instance the total products were 3600, and were represented in money by 3600*l.*; in the latter case, the products by the supposition are increased to 3900, and they are estimated in money at 3900*l.* Mr. Ricardo would give the same money value after as before the increased productiveness of class 3, but in doing so his standard would evidently be increased in value, notwithstanding he assumed it to be the same; for 1200*l.* in the first instance would command, under the several heads of necessaries, conveniences, and luxuries, a value equal to 1200*l.*, in the latter instance a value equal to 1300*l.* The standard would therefore be increased in value, and could not express the variations in other things. On the contrary, according to my theory, the integrity of the standard is not destroyed, but still preserves the same purchasing power over the whole mass of commodities, and though it suffers as compared with classes 1 and 2, it gains equivalently in class 3; and in reference to all the classes it maintains an equality of relation. The effect would be the same on value, if

an increase in production of 10 per cent. had taken place in all the classes; they would then, as before, command an equal money value of 1300*l.* But the effect of a fall of wages would be different. Supposing, instead of 20 men at 50*l.* each per annum, 20 men at 45*l.* per annum, are only necessary in all the classes to produce the former amount of commodities, it is evident, notwithstanding there will be a change in the distribution of goods, there will be no change in the total value, because by the supposition there has been no change in the total amount of commodities; for though the labourers will receive 10 per cent. less upon what they formerly received, the capitalists will receive 10 per cent. more upon what they formerly advanced, and the cost of production, and consequently value, will remain the same. There are two ingredients in cost of production, wages of labour (or capital, which is a multifarious accumulation of wages and profit) and profits of stock. These two make up the cost, and any fluctuation in the one, unless countervailed by an opposite fluctuation in the other, will alter cost, and consequently alter value. It will therefore be very evident, that as the cost of producing any commodities varies by variations in the producing labour of every other commodity, it can only be ascertained by an invariable standard. Money, Mr. Ricardo assumed to be this invariable standard, but though assumed by him as such,

it was an assumption to be invalidated as often as he assumed alterations in other things. Mr. Ricardo forgot that it was only upon certain data that one beaver exchanged for one deer. For instance, he would assume them to be the produce of one day or one week's labour, and that therefore they would mutually exchange for each other. But only after postulating one day or one week's labour capable of catching one beaver and one deer; postulate the same labour to produce two beavers and two deer, and the beaver, now produced by half the former difficulty, will still exchange for one deer. *Labour, and the general productiveness of labour* then, or what is the same thing, *cost of production,* can only be the determinate cause of value. Rent cannot by possibility be a component of cost, for if it were, supposing the supply of corn adjusted to the demand, the abolition of rent ought to lower its price. But the price could not be lowered by its abolition, for should this be the case, that land which pays no rent must be thrown out of cultivation. This however is impossible, unless there was previously a surplus production of corn; and as we assume there was not a surplus production of corn, rent cannot be an ingredient of the cost of production.

But we will advert to the writings of economists generally, and scrutinize their opinions on this difficult subject.

Mr. M'Culloch, the able Professor of Political Economy in the University of London, under the article Political Economy in the Supplement to the Encyclopedia Britannica, adopts implicitly Mr. Ricardo's doctrine, that quantity of labour is the cause of value. But in his "Principles" published in 1825, also in the second edition, after he had seen the "Dissertation on the Nature, Measures, and Causes of Value," for the first time, besides the natural division of value into value in use and value in exchange, Mr. M'Culloch adds another, viz. *real* value, the absurdity of which is so evident, that it is surprising he should have resorted to so extraordinary an auxiliary.

In an edition of A. Smith's Wealth of Nations, published by Mr. M'Culloch in 1828, in a note on value, vol. 4, there is the same division of value into real and exchangeable. I shall confine my strictures to this note, and in order to guide my remarks, I intend noticing four things—

First.—The determinate cause or limiting principle of value assigned by Mr. M'Culloch.

Secondly.—The introduction of the term real value, and the reason stated for its introduction.

Thirdly.—The phrases, "the real is identical with the exchangeable," or "upon an average is identical."

Fourthly.—What must really be meant by these phrases.

First, then, as to the determinate cause

or limiting principle of value, Mr. M'Culloch is extremely plain, for at p. 85 he says, "The value of such commodities as are the product of labour, and are not subjected to any species of monopoly, is exclusively determined so long as their supply is adjusted according to the effective demand, by the quantities of labour required for their production." And at p. 88, "Let it be supposed, that when A. and B. were brought to market twelve months since, the supply of each was adjusted precisely in proportion to the demand for them. It is plain that, under such circumstances, their exchangeable value must have been limited and determined exclusively by their *real value*, or by the quantity of labour which was required to produce them and bring them to market." These quotations, as to the source and determining principle of value, are quite sufficient to shew Mr. M'Culloch's opinions thereon. But I trust enough has previously been stated to confute the principle; for it is very obvious that quantity of labour does not determine value, purely because (as before stated) it does not determine the productiveness of labour. If labour always did produce the same amount of commodities, it might then be appealed to as an unerring cause. But nothing is more variable, and therefore a more uncertain cause of value could not be advanced, as uncertain as the wages of labour. I deem it therefore a plain dictate of common sense, that value is *not* determined by quantity of labour;

consequently any farther argumentation, especially after what has before been said, will be deemed superfluous. I will therefore proceed to notice,

Secondly, the introduction of the term "*real*," together with the cause of its introduction, and this I am able to give in Mr. M'Culloch's own words, for at p. 85 he observes, "An unusually luxuriant harvest, by increasing the supply of corn above its average amount, will sink its value or price; while an unusually deficient harvest will have a directly opposite effect, or will, by reducing the supply of corn below its average, increase the competition of the buyers, and raise its value or price; though the quantity of labour expended in producing the whole crop in both years may have been the same; and so of any other commodity." "Hence, in order to disentangle this important subject, and to set it in a clear point of view, it is necessary to distinguish between the *exchangeable value* and the *real* or *cost value* of commodities or products." Thus we have a reason given for the introduction of the term *real value*. But as economists have generally a chapter specifically to explain how the temporary alterations in demand and supply may affect value, these are generally laid aside in investigating the permanent principles which determine value in exchange. The reason therefore assigned by Mr. M'Culloch appears of scarcely sufficient importance to warrant so ex-

traordinary an innovation in terms. Adam Smith had only value in use and value in exchange; Ricardo had merely these two kinds of value, and so had only Mr. M'Culloch when he wrote the article Political Economy in the Supplement to the Encyclopedia Britannica. However, in his "Principles of Political Economy," he has added *real value*. The adjunct "real" also appears in the note to his edition of Adam Smith from which we have quoted above. Now the Author of the Critical Dissertation on Value shewed clearly that Mr. Ricardo used the term unconsciously in two senses, and that Mr. M'Culloch had unwittingly followed his example. The introduction of the term "real value" was therefore to extricate himself from the disagreeable animadversions of this anonymous author, and not, as Mr M'Culloch really states, in consequence of possible changes in value from the temporary influences of demand and supply, because these are the subject of a separate chapter. So far, however, from the term "real value" relieving him from the painful situation in which he has been placed by adopting Mr. Ricardo's theory, it has placed him in a still more disagreeable situation, and has led him into great confusedness of expression, as all must allow who will take the trouble of reading the note on value to which I have before referred, and also the chapter on this subject in both editions of his "Principles of Political Economy." This leads me to notice,

Thirdly, The peculiar phraseology employed.

At p. 91 he observes, "Where there are no monopolies, and the supply of commodities in the market is exactly proportioned to the effectual demand, their exchangeable value is identical with their *real value* or their *cost*." At p. 95, "But although a knowledge of the comparative quantities of labour required for the production of such commodities as are freely produced, and may be indefinitely increased in quantity, will not enable us to pronounce as to their exchangeable value at any given moment, we may notwithstanding be assured that it must, generally speaking, be *identical with their real value*. The latter, if I may so speak, forms the *centre* or *pivot* round which the *former oscillates*." At p. 97, "The quantity of labour required to produce commodities is at once the only determining principle and measure of their real, and also of their *average* exchangeable value." And at p. 100, "Upon an average their exchangeable is *identical* with their real value; that is, it depends upon and is measured by the quantities of labour required for their production."

To shew my reader the contradiction of terms into which Mr. M'Culloch is betrayed by the phrase "the exchangeable is identical with the real," I subjoin his definition of exchangeable and real value. "By the first," he says, "or the exchangeable value of a commo-

dity or product, is meant its power or capacity of exchanging either for other commodities or for labour; and by the second, or its real or cost value, is meant the quantity of labour which is required for its production or appropriation." Thus a property vested in any article of commanding or exchanging for other commodities or labour is stated to be sometimes identical with the real value of a commodity, or the quantity of labour necessary to produce it, or any other commodity. Now what can Mr. M'Culloch mean by exchangeable power and quantity of labour being identical? If we were to search creation through, we should probably not find any two things more essentially diverse than the sweat and toil of the labourer and the property of exchangeable power which all commodities not spontaneously produced invariably possess. How then can it be said they are sometimes identical? By identity every one understands sameness, not diversity. Is it possible therefore that the most refined sophistry can make the mere exertion of physical strength by the labourer to be the same as the quality of exchangeable power? Suppose it is granted to Mr. M'Culloch that quantity of labour is the cause of value in exchange, will it not then be gross impropriety of speech to say the cause is, at any time, identical with the effect. Did any one ever exist, so infatuated as to contend that the effect of a thing is the same as the cause of a thing, and that they may be used in-

differently? And yet Mr. M'Culloch says that quantity of labour the cause, and exchangeable value the effect, may be identical, abstracting the temporary influences of demand and supply. But however absurd this phrase is, it is a simple absurdity: the expression however "upon an average is identical," is a compound absurdity, for besides what we have just been noticing there is the addition of "upon an average." Now this is the first time I ever heard that an average could be made of different and heterogeneous things. To say the chords of a piece of music are very harmonious, or very discordant, though true or false, would not involve a contradiction of terms. To say also that the colouring of a certain picture upon an average was very gaudy or very dead, and the expression could convey nothing contradictory. But if it were said the average chords of the piece of music were identical with the average tints of the landscape, it would be grossly absurd. Sound and colour, like sweat and toil, and exchangeable value, are things as different as possible; to say, therefore, upon an average they are identical, is ridiculous and without meaning. But though the expression be obviously contradictory, the writer must certainly have intended, however unsuccessfully, to convey some idea. As I have been at some trouble in attempting to understand Mr. M'Culloch, I shall consider,

Fourthly, What must really be intended by the phrases.

The only possible meaning I can conceive Mr. M'Culloch intended by the expression, "the exchangeable upon an average is identical with the real," must be this—as he conceived quantity of labour to be *the* cause of *the* value which any commodity at any specific time possessed abstracting the temporary influence of monopolies and variations in the demand and supply, he imagined that under the influence of these causes, upon an average of years, the value of any commodity would be the same as its natural or cost value. For though the influences of demand and supply, and monopolies, might sometimes raise the value of any commodity a little above, they might sometimes sink it a little below its natural cost, and that upon an average of years the natural value of any commodities determined by quantity of labour, and the market value of any commodities determined by the relation of demand to supply might be identically the same. Thus, if we imagine all commodities to be represented by A. B. C. and the quantity of labour to produce A. be the same as the quantity to produce B. and C. the exchangeable value of A. B. C. (if the supply is precisely adjusted to the demand) will be equal according to Mr. M'Culloch, and will be identical with their real or their cost value; and if, by extraordinary demand, A. should command at one time B½ and C½, and by an extraordinary supply at

another time command only ½ a B. and ½ a C. the oscillation on the one side would obviously balance that on the other, so that the medium exchangeable and real value would be identical. This is the only meaning I can attach to the term "real," when asserted to be identical with the exchangeable, without involving an outrageous contradiction of terms. It must, however, be very obvious, that if "real value" means natural or cost value in these passages, it is used flagrantly in an opposite sense to Mr. M'Culloch's definition of it, because he defines "real value" as being only another word for quantity of labour, in contradistinction to exchangeable value: whereas, in the above quotations, it must mean what economists, in my opinion, correctly call natural value. I have read Mr. M'Culloch's doctrines of value very attentively, and must confess that, owing to the chameleon nature of his "real value," his doctrines have appeared on many occasions inexplicable to me. The knowledge, however, of his using the term in two senses, will tend to relieve the reader of much perplexity which he might otherwise experience in attempting to untie this gordian knot. An author may define his terms as he pleases; all that is required from him is to use them consistently with the definition, and Mr. M'Culloch having stated "real value" in several places to be measured by quantity of labour only, to use it in any other sense, without notice to his reader, was the best

way he could have devised to cover his theory with a most confusing mysticism. The professor, therefore, has only a choice of difficulties; for either the phrase, "the real and exchangeable are identical," is an absolute contradiction, or he used the term "real value" in the sense of natural and exchangeable value, after having defined it to mean quantity of labour. But there is another difficulty in Mr. M'Culloch's using the term, as we have supposed he must have done, in order to avoid an absurdity, and it is this, viz. that quantity of labour determines exchangeable value. For if the term "real value," in the passages above alluded to, means natural value, or in other words, that species of value which replaces the producer's capital with the ordinary profits of stock, and that "real value," understood in this manner, be identical with its average exchangeable value, or a value regulated by the temporary and accidental influences of demand and supply; then it will follow that quantity of labour, upon an average of years, will be a determinate and certain cause of value in exchange, and may be appealed to as a sure and infallible criterion of the worth of any commodity. Now though this property of quantity of labour, as will appear by the quotations under the first head, is in perfect accordance with Mr. M'Culloch's own expressions, it is nevertheless in direct contradiction to many sentiments that appear in other parts of the note. For instance, at 93

he observes, "Suppose that A. and B. are commodities produced by equal quantities of labour, and that the supply of them brought to market is exactly proportioned to the effectual demand, their real and exchangeable values will in such a case be equal. Suppose now that, from some cause or other, the quantity of labour required to produce A. is doubled, and the quantity required to produce B. trebled. In this case it is plain that the real value of A. will be double what it was before; but as the real value of B. has increased still more rapidly, the exchangeable value of A. will have sunk as compared with B. in the same proportion in which the labour required to produce the latter exceeds that required to produce the former, or in the proportion of two to three." Again, at 92, he says, "A day's labour in a rude state of society, when the arts are in their infancy, and the machines used by the labourer comparatively inefficient, will undoubtedly yield a very different quantity of produce from a day's labour in an advanced and civilized period, when the arts are highly improved, and the most powerful machinery universally introduced. Nothing, however, can be more obvious, than that the sacrifice made by the labourer is quite as great in the one case as in the other. The variation is not in the amount of physical force, or of labour exerted by the agent that produces, but merely in the *mode* in which that force is applied. But, however

the same quantity of labour may be laid out, and whatever may be the amount of its produce, its performance must unavoidably occasion the same sacrifice to those by whom it is performed; and hence it is plain, that the products of equal quantities of labour, or of toil and trouble, must, however much they may differ in magnitude, always be of precisely the same real value." Here then we see Mr. M'Culloch considered quantity of labour *not* to be a determinate cause of value, in consequence of the unequal amount of commodities which a given quantity of labour will produce in a savage state of society, and when the arts are in a high state of refinement. But if quantity of labour be an indefinite cause of value under different circumstances of production, how can it at any time be said, as Mr. M'Culloch has so unequivocally stated it, to be *the* cause of value in exchange. But whether quantity of labour be the cause of value or not, it appears very useless to say, in a chapter of exchangeable value, that the same amount of physical exercise by the labourer in one state of society, is the same as in another. The investigation does not turn on the sacrifice of physical strength by the labourer, or on the amount of his sweat and toil, but on the nature and causes of value: this is the subject of inquiry. But Mr. M'Culloch, though he has defined exchangeable value correctly, has not satisfied the inquirer as to its cause; on the contrary, he is betrayed into strange inconsis-

tencies and contradictions of thought and language.

We shall now be prepared to make a general estimate of Mr. M'Culloch's doctrine of value. The credit of pointing out the double meaning Mr. Ricardo attached to the term value is due entirely to the ingenious Author of the "Dissertation on the Nature, Measures, and Causes of Value;" and Mr. M'Culloch having followed Mr. Ricardo exclusively in the supplement to the Encyclopedia Britannica before alluded to, thought of obviating objections by the introduction of the term "real value" in his "Principles of Political Economy," and in his edition of the "Wealth of Nations." But the chaotic confusion to which it has led him, will be justly appreciated by the intelligent reader. The term value in itself is simple enough, and the science of Political Economy does not require a better, and its division into value in use and value in exchange by Adam Smith, Ricardo, and other Economists, is both natural and proper. The investigation then refers to the causes of value in exchange. Adam Smith says the purchasing power of labour is the cause, Ricardo, quantity of labour, and Mr. M'Culloch, quantity of labour. But if quantity of labour be the determining cause of value, supposing the cause remains invariable, the effect should be so; this, however, Mr. M'Culloch admits will not be the case: hence, to mystify the whole inquiry, "real value" is introduced; and by the double meaning in

which it is employed, all kinds of objections to its being an invariable and determining cause of value, are merged in the attempt to shew that the differences originate in the particular influences of demand and supply. The preceding arguments lead us to the following estimate of Mr. M'Culloch's doctrine of value:—

That quantity of labour, abstracting the temporary influences of monopolies, and demand and supply, determines value in exchange; and yet, in consequence of variations in the productiveness of labour, does *not* determine value in exchange.

That real value means quantity of labour, or the physical exercise of the labourer; and yet does not mean quantity of labour, but what is commonly called cost or natural value in exchange; or else,

That real value or quantity of labour is the very same identical thing with value in exchange, or the power of commanding other goods or labour, though they are obviously most diverse; and lastly,

That the sweat and toil of the labourer are, in all periods of time, the same as the sweat and toil of the labourer.

In the "Elements of Political Economy," by Mr. Mill, third edition, though I do not find the division of value into real and exchangeable, I find it unequivocally stated, that cost of production (defined quantity of labour) is the principle which determines exchangeable

value. Though no one esteems more highly than myself Mr. Mill's "Elements," yet I essentially differ from him as to the determining principle of value. To say more would be superfluous, because my previous strictures upon Mr. Ricardo may be applied to Mr. Mill, who adopts the Ricardian theory.

Beside Mr. M'Culloch and Mr. Mill, disciples of Mr. Ricardo, may be ranked the Author of the Dialogues on Political Economy which appeared in the London Magazine for the months of April and May, 1824; and whether we regard the boldness which characterises these dialogues in expounding Mr. Ricardo's doctrine of value, or the humour which pervades them throughout, they are equally worthy of our notice. They shew also visible marks of having been written by a person of cultivated understanding, and the extent to which Ricardo's law is pushed, forms indeed an "*experimentum crucis*," by which its truth or error may be ascertained. But I do not seriously suppose the author really inherited the doctrine bequeathed by Mr. Ricardo. On the contrary, I view the dialogues as an ingenious logical legerdemain, in which the author was more desirous to shew his skill as a disputant, than seriously to expound the doctrines of truth, or combat the pernicious influences of error. I doubt not, however, if truth, and not an exhibition of dialectical ingenuity were his object, that he has discovered by this time solid reasons for

altering his sentiments; for if the reflections of his own mind were insufficient for this, the reflections and reasonings of the Author of "The Dissertation on the Nature, Measures, and Causes of Value," must have been enough, as the latter has in a masterly manner demonstrated, that X. Y. Z.* used the term value unconsciously in two senses. Indeed it does not require any peculiar formation of the optic nerve to see this. For in the first Dialogue, where the author has a tilting match with Adam Smith, the worth of his argument depends entirely on the fact of value being used in the sense of exchangeable power. Smith says, when the wages of labour rise, value rises. No, replies the dialogist, as wages are paid by all producers, value cannot be altered by any change in the purchasing power of labour; and this he farther demonstrates algebraically. But when all commodities are supposed to rise in their producing labour, he then most emphatically asserts that there is no possible connection between the thing commanded and the thing commanding; a very strange transition indeed!†

* The designation assumed by the Author of the Dialogues.

† Abstracting however the logical error which pervades all these dialogues, there is a point in them really useful in an economical sense, and it is the definition of the word "determine," which is often used indiscriminately, both *subjectively* and *objectively*.

The verb is used subjectively or as the *principium cognoscendi*, when it is said the thermometer determines the temperature of the air, or money the value of commodities; and objectively, when it is

To say the least, however, of these colloquial discussions, they have been abundantly useful in unfolding the doctrine of value if they had only given rise to the "Dissertation on the Nature, Measures, and Causes of Value." Not that I think this a performance likely to set the controversy at rest; on the contrary, I consider the Author's use of the term value, on many occasions, inconsistent with its obvious meaning, and the chapter on the causes of value, in my opinion, leads to nothing less than absolute scepticism. So that, however certain I am, that the work has done much to evolve the difficulties in which the subject was acknowledged to be enveloped, and however dexterously I conceive the author detected the double meaning in which Mr. Ricardo used the term, I cannot but regret the appearance of these blemishes. Of course, in an inquiry respecting the causes of exchangeable

affirmed that gravitation determines the stone to fall downwards to the earth, or labour and the general productiveness of labour determine value in exchange. In the first sense it is plainly not used causatively, but as a criterion, or as determining the heat and the value of commodities to our knowledge, and may be used indifferently with the verb ascertain. But in the latter case it *is* used as the ground or cause; for gravitation does not *ascertain* the descent of the stone to our knowledge, and labour and the general productiveness of labour do not *ascertain* the value of any commodity, but cause them, are indeed their *principium essendi*. This obvious distinction ought always to be attended to, for much obscurity has been engendered by its palpable neglect. The dialogues also abound with some ingenious strictures on the measure of value propounded by Mr. Malthus; to all of which, of course, I cannot agree, and simply because my view of value is different from the Author of the Dialogues.

value, as I have before observed, economists very properly abstract from their notice the temporary influences of monopolies, and demand and supply, and endeavour to explain the permanent principles which determine why such a commodity, or such commodities, exchange for a determinate or fluctuating portion of other commodities. This determinate cause I conceive the author of the "Dissertation" has not stated. It is true, at p. 205 he says, it "may be correctly stated to arise principally from the cost of production; and that cost of production may be either labour or capital, or both." But this definition of cost is defective; it does not include profit, and therefore never can determine value, because, though the labour or capital should not vary, the profit may vary, and consequertly the value of any commodities.

Neither do I agree with the distinguished French economist, M. Say. This great Adam Smith of France, who has done so much for the science of political economy, esteems utility the basis of value. Utility is the basis of aggregate value, that is, a nation is rich or poor, or has a great or small national value, in proportion to its aggregate utility, but it cannot be affirmed of any specific commodity that it is valuable or not in the ratio of its utility. Cost of production is *the* cause of the specific value in exchange which any commodity may possess. A. may increase in cost, and conse-

quently exchange for more of B.; but just so much as A. gains in value and cost, B. and all other commodities (if the amount produced remains the same) in the aggregate, lose. So that, though an alteration in the cost of a particular commodity may alter *its* relation to other things, it cannot be said of aggregate value or aggregate cost, that there is any increase or decrease unless there is an increase or decrease of utility. We suppose there is not; consequently the aggregate mass of value, and cost, remains stationary. Every increase or decrease in the productiveness of labour will necessarily, according to the principle previously disclosed, affect *profits;* the former will as assuredly raise as the latter will certainly lower them. But supposing the *rate* of wages remains the same, an increase or decrease in the quantity of labour necessary to produce the *same* commodities, notwithstanding they will alter the total *amount* of wages requisite for their production, and this *amount* of wages must vary inversely with profits, cannot alter cost. If cost consisted separately of wages or profits, any greater or less quantity of labour required to produce the same commodities would of necessity alter it. Cost, however, is compounded both of wages and profits, and the commodities produced remaining stationary in quantity, it will infallibly follow that neither value nor cost can in the least alter, though the quantity of labour necessary to produce commodities ever so greatly

vary. M. Say was singularly confused in his explication of the *causes* of value, for though he justly saw that a nation was rich or poor in proportion to the amount of its useful products, and that a commodity was valuable or not, as it exchanged for many or few of these products, he did not understand the true principle which determines value in exchange.

But I so far agree with M. Say in considering the wealth and value of a nation to be identical, that I necessarily differ from Colonel Torrens, who, in his work on the production of wealth, endeavours to prove by what appears to me unsatisfactory arguments, that national wealth is not determined by the sum of values of which it is composed. Now what do economists mean by exchangeable value? A power vested in any commodity of exchanging for other commodities which possess utility. How then can it be otherwise than that the sum of these various powers be but the sum of their utility? Aggregate value, therefore, can be nothing more or less than aggregate wealth or utility. If improvements in production take place, there follows necessarily an increased amount of useful products and an increased amount of value in exchange. Col. Torrens also says that value is not an essential but accidental adjunct of wealth, for he observes, "Abolish the divisions of labour, or establish a community of goods, and in either case exchangeable value will be lost." As, however, it

is an essential part of the present system of affairs that labour be divided, and that there be *no* community of goods, I am much more inclined, with all deference to the author, to consider value an essential, rather than an accidental quality of wealth. When it is affirmed that cost of production is the cause of value, it is of course taken for granted that there is in all channels of industry an equality of profits. But though this is taken for granted, we are assured that there are very frequent and very great departures from equality. Still, however, we are satisfied there can be no difference for permanent periods of time, and therefore we take an equality of profits as the rule, and an inequality of profits as the exception. Just so with value, many commodities there are, as doubtless there must be, which are consumed without being exchanged; this, however, is only an exception to the rule, for in the vast majority of instances the products we consume are by no means the result of our own industry, but are what have been purchased in the market with equivalents advanced. But Col. Torrens proceeds to explain the causes of comparative or proportional value at the same time, previous to the accumulation of stock. This, however, does not satisfy the inquirer, for our object is not to ascertain that A. is twice as valuable as B. because it takes twice the producing labour, but to ascertain the cause of the determinate value of A. to all commodities. To say one man has

double the wealth of another man informs us nothing, if we know the wealth of neither. Value meaning exchangeable power, an effect of some principle or other, must have a cause. This cause, however, Col. Torrens does not state; his section on value is consequently incomplete. But this gentleman proceeds to that period when a nation has accumulated stock, and then he states comparative or proportional value to be determined by capital. Capital however, Mr. Mill properly says, is commodities, and to say the value of commodities is determined by the value of commodities is not solving the difficulty, or stating any cause whatever. To this the author of the Dissertation on Value has objected, and contends it is really assigning a cause, though only the proximate cause. But the assigning of this proximate as the efficient cause appears to me really as unsatisfactory to the inquirer as if it were asked me what moved the last of a series of waggons linked to a loco-motive engine, and I answered, "the preceding waggon." The preceding waggon was certainly the proximate, though not the efficient cause; the reply, therefore, would be unsatisfactory. Were I, however, to say the "steam engine," the inquirer would be satisfied. And just as incomplete is the cause of value assigned by Col. Torrens, it is not a perfect answer to the question. Granting, however, that it is the real cause of comparative value, it then is subject

to the objection just urged against quantity of labour previous to the accumulation of stock. For neither capital nor quantity of labour determines the cause of the specific value which any commodity at any particular time possesses, and it is this we want. But though Col. Torrens in many places asserts quantity of labour or capital to be the cause of a *comparative value only*, in other places he states absolutely that they determine value. The confusion evidently arose, as I shall afterwards have occasion to notice, from the view he took respecting a standard of value.

But Col. Torrens thinks it improper to include profits in natural price or cost of production; he says, p. 51, "The profits of stock never make any part of the expence of production; they are, on the contrary, a new creation brought into existence in consequence of this expence." This is very erroneous, for if the profits of stock do not form a component part of cost, the wages of labour cannot; as the former is to the capitalist what the latter is to the labourer. The labourer gives his muscular strength and time, and receives reward under the term wages. The capitalist finds the implements of husbandry, the machines of manufactures, advances the wages of labour, and receives his reward under the term profit. Now the wages of labour fluctuate like the profits of stock; sometimes they are at a high and at other times at a low rate. If, then, the wages of the

labourer given for his muscular strength be considered part of the cost of production, the profits of stock, which are received in return for the capitalist's advance, must also be considered a part.* The capital too, which Col. Torrens himself assumes to be employed in production, and which he considers to express the natural price or cost of the products obtained by it, would be, if analyzed, composed of that very element for adopting which he finds fault with economists. Money, for instance, the sign of his capital, were all its various transmutations traced, would probably be compounded part of the wages of labour and part of the wages of capital in a million different ways. So much then for Col. Torrens ejecting profit as an element in the compound cost, and so much for his consistency in assuming the cost of production to be totally included in the capital employed. Supposing a labourer agrees to sell the produce of his labour for a certain sum, taking the average, he neither receives more nor less than other labourers similarly situated. The price given in such a case forms the common or natural wages of labour. When a capitalist embarks his money in any enterprise, he expects to obtain a sum equal to what other capitalists obtain who employ a similar sum and incur equal risks. If the price of his produce be not equal to replace the capital employed,

* Mr. Malthus also, "In his Definitions in Political Economy," thinks it proper to include profits in cost of production.

together with the ordinary profits of stock, he naturally transfers it into such a channel where the common return to capital may be obtained. The ordinary profits of stock, added to the capital employed, therefore form the natural price that must be given, or the cost of production, and no sort of commodities for any length of time will be produced, unless a sum equal to their cost is received. These opinions so accurately coincide with Adam Smith's, that I cannot resist the temptation of transcribing them. At p. 94, vol. I. book I. M'Culloch's edition, he says, "Though in common language what is called the prime cost of any commodity does not comprehend the profit of the person who is to sell it again, yet if he sells it at a price which does not allow him the ordinary rate of profit in his neighbourhood, he is evidently a loser by the trade; since by employing his stock in some other way he might have made that profit. His profit, besides, is his revenue, the proper fund of his subsistence. As, while he is preparing and bringing the goods to market, he advances to his workmen their wages or their subsistence; so he advances to himself, in the same manner, his own subsistence, which is generally suitable to the profit which he may reasonably expect from the sale of his goods. Unless they yield him this profit, therefore, they do not repay him what they may very properly be said to have really cost him."

In Col. Torrens' invaluable Essay on the

External Corn Trade it is also stated that capital, exclusive of profits, forms the cost of production. Thus, if a farmer employs a capital of 1000*l.* in the production of corn, and the corn sells at the expiration of the year for 1200*l.* profits being 20 per cent. Col. Torrens would say the cost of producing it was 1000*l.* Now, though at the same time, a capital represented by 1000*l.* would be twice as great as a capital represented by 500*l.*, at different times and under changes in production it might not be so. For, in consequence of the general dearness of commodities at one time, and their general cheapness at another, nothing can be more ambiguous or uncertain, than estimating the value of capital in money, a medium so very fluctuating. £500 at one time might be really as great a capital as 1000*l.* at another. This is a principle so generally admitted, and so very obvious, that the following quotation appears to me very erroneous. At page 85 he says, "Let us suppose, in the first instance, that the real annual wages of the labourer consist of six quarters of corn, and three suits of clothing; and that a quarter of corn and a suit of clothing cost each 3*l.* This being the previous state of things, we will suppose further, *that while the cost of producing the material of money and all other commodities, remains unchanged, the cost of raising corn is doubled;* and then the price of that part of the labourer's real annual wages which consists of corn, will

rise from 18*l.* to 36*l.*, and the price of his whole real wages from 27*l.* to 45*l.*" Thus we find that cost, which is, according to Col. Torrens, identical with capital, and expressed by a given amount of money, may remain stationary when it is assumed to fall in value compared with corn, which forms so large a part of the whole products of industry. If money were a home-produced commodity, and corn were to be raised by twice its former difficulty, it would clearly be raised in price. But then this hypothesis most glaringly incapacitates money from being a perfect instrument to measure cost. However much society generally is indebted to Col. Torrens for his admirable essay, the sentiment quoted, which more or less runs through his whole work, appears to me a great blemish in what would otherwise be an almost perfect performance.

It is also easy to confute the Malthusian theory of value. In his work on Political Economy, chap. 2, Mr. Malthus lays down the principle, that the proportion of demand to supply is the dominant cause of value, and that cost of production is subordinate to it. Thus, if a yard of cloth exchange for a bushel of wheat, he would say it was the relation of the demand to the supply that determined their value, and not the quantity of labour spent in their production. It is certainly not my object now to argue that their value is caused by quantity of labour in Mr. Ricardo's or any other person's

sense, because I have before attempted to prove that value is otherwise determined; still the theory of Mr. Malthus I consider radically defective, for I much mistake if it does not lead him into inextricable difficulties. For instance, in the case of cloth and corn, should any improvement be made in the manufacturing of the former, and its price should proportionately fall, he would say that the fall was not owing to any diminution in its cost, but to an increase in the supply. Thus, though such an amount of capital should be withdrawn from its production as would neutralize the increased facility of its manufacture, the demand for the same identical number of yards continuing as before, Mr. Malthus would still say the supply of cloth had increased, or what was the same thing, that there was a less demand for it. But he evidently could not say so without manifest contradiction and absurdity, if by demand he meant the quantity demanded, and by supply the quantity supplied. But he does not understand demand and supply in this sense; he makes use of the epithet "intense," and considers the demand increased, if the value given be increased, though the quantity demanded be the same. Consequently, notwithstanding cloth should fall in price, and the very same quantity of yards as before be only produced, Mr. Malthus would still contend there was a less intense demand or a greater intense supply. This meaning, however, of the terms will not in the least help

him, for by intenseness of demand we commonly understand vehemence or great desire; it would, however, be difficult to prove that cloth is less desirable when its price falls; the reverse being much nearer the truth. Water, for example, is demanded, it being essential to existence, but because it costs nothing there must not be supposed a less intense demand for it than if it cost individuals 10*l.* per annum. In the latter case there is certainly a greater *expression* of desire for it, because in the first case nothing is expressed, in the last the desire is manifested by 10*l.* per annum being given; but in either case water is equally demanded, and equally essential to existence. To say, therefore, that one A. exchanges for two B. precisely on account of such a ratio of intenseness between the demand and supply is not evolving the phenomenon of value, but giving a very nugatory explanation of it. It appears to me much the most natural way of accounting for the effect, to say the cost of producing A. is double the cost of producing B. and that this is the reason why one A. exchanges for two B.

I have thus brought the first section to a close, but I cannot dismiss it without a brief recapitulation of what has been stated. It has been shewn

That quantity of labour assigned by Ricardo, Mill, M'Culloch, &c. is as erroneous a cause of value as the price of labour advocated by Adam Smith.

That cost of production, meaning labour and the general productiveness of labour, is the cause, and the only cause why one commodity exchanges for a determinate or fluctuating portion of other commodities, or in other words, of value in exchange.

That the divison of value into real and exchangeable by Mr. M'Culloch has led that gentleman into glaring contradictions.

That the causes of value, as stated by the author of the "Critical Dissertation," &c. are extremely unsatisfactory; notwithstanding many parts of that work cannot but be admired by every one friendly to the science of political economy.

That the doctrines of value advocated by M. Say, though correct in assigning wealth and value to be identical, are very erroneous in affirming utility to be the cause of exchangeable value.

That capital, as the determining principle of comparative value, stated by Col. Torrens, is insufficient to satisfy the inquirer; and that the Malthusian theory of demand and supply is most obviously wrong, notwithstanding the peculiar meaning attached to these terms.

All these theories, with the exception of Malthus' and Say's, assign true causes of *a* value. Both quantity of labour, wages of labour, and capital, will always produce something possessing exchangeable power over other commodities, but it will not be to any of them that we

can look for specific causes of a specific value, and therefore they can not furnish us with a solution of the phenomenon of value.

Cost of production or labour and the general productiveness of labour, however, do furnish us with a specific cause, and had we an invariable standard, the exact measure of the cost of any commodity would be the precise expression of its value in exchange.

SECTION II.

Mr. Ricardo in this section points out the different qualities of labour, and states them to be "no cause of variation in the relative value of commodities:" for he observes, "the estimation in which different qualities of labour are held, comes soon to be adjusted in the market with sufficient precision for all practical purposes, and depends much on the comparative skill of the labourer, and intensity of the labour performed. The scale, when once formed, is liable to little variation. If a day's labour of a working jeweller be more valuable than a day's labour of a common labourer, it has long ago been adjusted, and placed in its proper position in the scale of value."

He then proceeds to state, that as the comparative skill and intensity of the labour to be performed operates equally at both periods, it needs scarcely to be attended to in comparing commodities at different times, and further observes, that "the proportion between the different rates, both of wages and profit, in the different employments of labour and stock, seems not to be much affected, as has already been observed, by the riches or poverty, the advancing, stationary, or declining state of society."

As Mr. Ricardo in this section appears to me to have omitted to state with sufficient clearness the causes of the difference of various kinds of labour, I shall endeavour to supply this deficiency, as the subject could scarcely be understood without it; and then the assertion, that "the scale when once formed, is liable to little variation," will appear palpably incorrect.

With reference to the causes of the various kinds of labour it may be observed, that to say the estimation in which different qualities of labour are held, determines their value, is no solution of the phenomenon. A physician's fee is not given because his labour is more esteemed than a common gardener's, but because he demands more; it is but a just reward for talents that have cost him many anxious years of study to acquire. He has (if I may use the expression) embarked a large capital

in his profession, and his fees are but an adequate interest or profit upon his expenditure; they are the necessary price that must be given for the existence and continuance of so valuable a class of men. The subject will be better understood by a definition of what is meant by the labourer, in contradistinction to capital. By a labourer we mean that person who gives, for wages, mere muscular strength; his unassisted bodily powers, which have been gratuitously given him by a beneficent Creator. Hence a collier, a day-labourer, a porter, a ploughman, &c. are labourers in the strictest sense of the term. To be fitted for their various occupations, they have only required the growth of their bodies and that common share of sense with which man is commonly endowed. On the other hand, by capital we mean instruments, either material or immaterial, which abridge or assist labour. The former includes machines of all sorts, implements of husbandry, waggons, boats, canals, roads, &c. The latter includes the acquired talents of the divine, the physician, the lawyer, the painter, the musician, the player, engraver, &c. &c. Now none of these last derives the value of his labours from any actual or supposed muscular strength which he may possess; nor from any material capital embarked in his profession: for perhaps the sacerdotal appointments of the divine, such as the surplice, gown, &c. and a few books, form all the "*materiel*" necessary to commence his la-

bours. A library and the furniture of a room also are all the physician and lawyer principally require; and a fiddle and a few colours will set up the musician and the painter. It is therefore very evident, that none of these derives the value of his labour either from any superior muscular strength or material capital which he may employ; but a very few arguments will be sufficient to prove that it is owing to the cost of his attainments; that is, to the money he has spent and the time he has sacrificed in acquiring his professional fitness. It will consequently follow that the value of all this kind of labour will upon an average be in proportion to the difficulties to be surmounted, and to the comparative skill required. But in the same manner that quantity of labour is insufficient to solve the phenomenon of exchangeable value in commercial products, quantity of labour is insufficient to explain why one profession receives a great and another a small remuneration. It is insufficient, because it takes no cognizance of profit. Cost of production, however, as I have defined it, does take cognizance of profit; it is therefore the cost of producing that professional skill to which we must look for a correct cause why one quality of labour receives a higher compensation than another. Mr. Malthus has objected to this doctrine, and has cited the insufficient pay of curates to support his objection. But I do not consider the objection valid, for if we regard the whole

Church establishment, the funds cannot by any means be said to be insufficient. Many candidates there certainly are, but many prizes are there too, and in the lottery of life man is too prone to calculate upon prizes than blanks. Promotion is continually going on, and this is an incessant stimulus to the buoyancy of hope. We cannot calculate, humanly speaking, upon a supply of spiritual labourers, unless the remuneration given be in some sort of proportion to the sacrifices made. Of physicians and lawyers the same may be said. To make a physician there must not only be a maturity of bodily powers, but there must have been a long and anxious mental application. Books must have been read, lectures attended, operations performed, and perhaps half a man's life must have been unproductively occupied in order to give productiveness and efficiency to the remainder. All the money therefore embarked, and all the time spent, must be paid for; the physician must receive the ordinary remuneration for the capital consumed. Were he and all others of his profession not to receive this ordinary compensation, the race of physicians would cease. No one would be a candidate for a profession which yielded so low and inadequate a return. But, perhaps, in consequence of its gentility, persons might be found willing to prosecute their professional duties for a less compensation than they would be content with in common and trading operations. Say that the scale was in

the ratio of 7 to 10, or that individuals were satisfied to receive 7 per cent. merely upon their professional advances, when 10 per cent. was the ordinary profit upon commercial undertakings. In this case, should the fees, &c. be raised to 8 per cent. or diminished to 6, there would be a great professional influx or efflux. Upon the same principles, if commercial profits rise to 20 per cent. professional profits must rise to 14, or the same results would follow, viz an influx or efflux, should their return not equal, or should it exceed 14 per cent. If there were on the other hand to be a fall in commercial profits, a fall in the wages of this kind of labour would inevitably follow. Thus we see that a rise or fall of commercial profits will proportionably elevate or depress the fees of the physician. We may observe too, respecting the musician, painter, &c. that the value of their productions will be equal to the cost of producing them. If to make a first-rate painter greater industry is required than to make a first-rate musician, the productions of the former will certainly exceed in value the productions of the latter. But I must not be inattentive to the varieties of men's genius, or to the different worth of one painter's labour compared with another's. This variety in the genius of different men is much the same as varieties in the quality of land. When land of the first quality is only in cultivation, no rent is paid, and the value of the produce is exclu-

sively as the cost of growing it. When the price of agricultural produce begins to rise, and land of the second quality is demanded, rent is paid for No. 1. When land of the third quality is brought into cultivation, Nos. 1 and 2 both pay rent. Now supposing all the painters in the kingdom possessed the same merit, and that the supply of them was just equal to the demand, the value of their productions then unquestionably would be as the cost of producing them. But assuming these painters of the first order insufficient to meet the demand, their paintings would rise in price, and this would call into notice painters of the second order. Painters of the first order would therefore enjoy a species of monopoly, and the benefit would be in proportion to the difference between their genius and the genius of the last order necessary to produce the requisite supply. These remarks will apply equally to every superior quality of labour, and to all employments where skill is required.

On the contrary, mere labourers or those who advance nothing beyond their corporeal powers, receive from century to century a pretty stationary reward. The price of their labour is generally at the lowest level, and neither the prosperity nor the adversity of the country can for any length of time raise wages much above, or depress them much below that sum of necessaries which is required to keep them and to maintain their children, the future

labourers. But this is very different from that kind of labour the value of which is not owing to any bodily strength, but to mental acquirements; for it has been seen that this species of wages fluctuates with a fluctuation in profits, and it therefore cannot in truth be said, "that the scale when once formed is liable to little variation," or that different rates of wages are not much affected "by the riches or poverty, the advancing, stationary, or declining state of society," as they are evidently affected to a great degree by any alteration in them. Many opinions in this section accurately accord with the following passage by Mr. Senior, the learned Professor of Political Economy at Oxford, extracted from the Appendix to Dr. Whateley's Logic, p. 331:—"Much of what properly belongs to profit and rent is generally included under wages. Almost all economists consider the members of the liberal professions under the class of labourers. The whole subsistence of such persons, observes Mr. M'Culloch, is derived from wages; and they are as evidently labourers as if they handled the spade or the plough. But it should be considered, that those who were engaged in any occupation requiring more skill than that of a common husbandman, must have expended capital, more or less, on the acquisition of their skill; their education must have cost something in every case, from that of the handicraft apprentice, to that of the legal or medical student; and a profit on this

outlay is of course looked for, as in other disbursements of capital; and the higher profit, in proportion to the risk, viz. the uncertainty of a man's success in his business. Part, therefore, and generally far the greater part, of what has been reckoned the wages of his labour, ought more properly to be reckoned profits on the capital expended in fitting him for that particular kind of labour. And all the excess of gains acquired by one possessing extraordinary talents, opportunities, or patronage (since these correspond to the possession of land—of a patent right—or other monopoly—of a secret, &c.) may be more properly regarded as rent than as wages."

SECTION III.

To mark the climacterics of the mind, to see how the wild ebullitions of youth are followed by the solidity of manhood and the imbecility of old age, is very curious and very instructive. To watch, however, the wheel of national fortune, and to trace its circle through its various turns, from savage ignorance to refined civilization and high intellectual eminence, is equally curious and equally instructive. When we contemplate the solstitial splendour to which many European

countries are now arrived, compared with that thick and impervious mist of ignorance in which they were so long and inextricably enveloped, we are naturally desirous to ascertain how the moral and physical change was effected, and what were the particular steps of its progress. It was not accomplished electrically, but by slow and gradual means, and by a long series of causes and effects. To glance at these now, even generally, would be very irrelevant; but it will not be irrelevant to attempt to explain the particular principles which determine value in exchange in that intermediate state, limited on one side by savage barbarity and the non-accumulation of capital, and on the other by that polished civilization which we denominate the zenith of national greatness. It is evident, that in this parenthetical condition, the principles which determine the value of products are rather different from those which obtain in the two extremes that bound it on either side. Let us suppose, for instance, that an ingenious savage contrives by great industry and skill to manufacture a net, which is very serviceable in catching salmon: it is clear he will not exchange his fish for other commodities produced by the same labour; for were he to do so, all the advantages obtainable by the use of his net would be thrown away. But it may be asked, would he not obtain the same quantity of commodities as was produced by the same labour, including the labour spent in the manufacture of the

net? No.—The fisherman of salmon would evidently obtain as much of the hunter's produce as he obtained previous to the invention, because, if we suppose other salmon-fishers do not possess similar nets, the price of salmon clearly could not be battered down to the new cost, as the inventor would enjoy a species of monopoly much the same in effect as that enjoyed by patentees of the present day. The value therefore of the salmon will not be as its cost under the most favourable, but under the most unfavourable circumstances. No sooner, however, do the other fishermen obtain by their skill and industry similar instruments to facilitate salmon-fishing in sufficient abundance for the demand, than the monopoly of the first inventor ceases, and he then only receives a value in proportion to the cost, the same as all other producers. Consequently before that complete accumulation of capital, when instruments for abridging labour are employed in every department of industry, the inventor of any new instrument will always receive an additional value equal to the differences between the old and new method of producing. Thus, if in the fishing of salmon a man's labour for one day were generally rewarded with one salmon, and after the introduction of the net he could catch two, the value of the two will be twice the value of the single salmon. The inventor of the net will therefore gain just double the value which they who were destitute of it could gain.

But this state of things would not last very long, as the stimulus to invention would be immensely great. In a highly civilized state, where capital is accumulated in sufficient quantities for every purpose, the inventor of any new machine only enjoys advantages for a very inconsiderable time (unless he be legally protected) as the efforts of producers are always directed to the most favourable channels for the employment of their capital. Competition therefore soon batters down the price of such commodities to their new cost. But under these circumstances a patent is generally obtained, which is a very proper encouragement to inventive talent.

A hunter also would enjoy a similar monopoly to that of the fisherman, if he, by his address, had obtained weapons that abridged the labour of hunting. And the advantage gained would be equal to the difference in the quantity of products realized before and after this invention; nor would it cease until all hunters had obtained similar weapons. These results are curious; not, however, less certain on that account. But what are the determining principles of value, when capital is accumulated in all departments, and capitalists and labourers become two distinct classes? This question Mr. Ricardo answers in this section; for after citing the different kinds of labour necessary to produce stockings, he observes, "The aggregate sum of these various kinds of labour, determines

the quantity of other things for which these stockings will exchange, while the same consideration of the various quatities of labour which have been bestowed on those other things, will equally govern the portion of them, which will be given for the stockings." In the first section it has been stated that quantity of labour would not determine value in the early stages of society that precede the accumulation of capital, in consequence of variations in the productiveness of labour, and this was equally applied when capital was accumulated. It, however, applies with greater force, if the proportion of fixed and circulating capital be different; because this circumstance introduces another objection beside the greater one just mentioned. But Mr. Ricardo assumes the fixed and circulating capital to be equal, and therefore that the value of stockings, or any other commodity, is exactly determined by the aggregate sums of labour employed in their production. The value of any commodity, however, could not obviously be determined by the sum of its producing labour in consequence of changes in the productiveness of labour; and yet he is particularly explicit in this as in the preceding section, for at p. 24 he further remarks, "Fish then would rise or fall in exchangeable value, *only* because more or less lsbour was required to obtain a given quantity; and it never could rise or fall beyond the proportion of the increased or diminished quantity of labour required."

And then after noticing that commodities produced under the same circumstances were limited in value by the quantity of labour required to produce them, he remarks, that "unless more labour were required for their production, they could not rise in any degree whatever." But if fish were produced by the same quantity of labour, and all other things required more or less labour to produce them, it would most clearly alter the value of fish; and so of any other commodity. Nothing, therefore, can be more untrue than this doctrine of Mr. Ricardo. He is correct, however, in the following passage, "Suppose that in the early stages of society, the bows and arrows of the hunter were of equal value, and of equal durability, with the canoe and implements of the fisherman, both being the produce of the same quantity of labour. Under such circumstances the value of the deer, the produce of the hunter's day's labour, would be exactly equal to the value of the fish, the produce of the fisherman's day's labour. The *comparative* value of the fish and the game would be entirely regulated by the quantity of labour realized in each." Or what is the same thing, that whatever the value of the fish might be, will be the value of the game; which is obviously very different from stating that the value of any commodity is determined by the quantity of labour necessary to produce it, and that *no commodity can alter in value except by an alteration in its producing labour.*

But Mr. Ricardo further observes at p. 22, "If there were any other commodity which was invariable in its value, we should be able to ascertain, by comparing the value of fish and game with this commodity, how much of the variation was to be attributed to a cause which affected the value of the fish, and how much to a cause which affected the value of game." "Suppose money to be that commodity. If a salmon were worth 1*l.* and a deer 2*l.* one deer would be worth two salmon. But a deer might become of the value of three salmon, for more labour might be required to obtain the deer, or less to get the salmon, or both these causes might operate at the same time. If we had this invariable standard, we might easily ascertain in what degree either of these causes operated. If salmon continued to sell for 1*l.* whilst deer rose to 3*l.* we might conclude that more labour was required to obtain the deer. If deer continued at the same price of 2*l.* and salmon sold for 13s. 4d. we might then be sure that less labour was required to obtain the salmon; and if deer rose to 2*l.* 10s. and salmon fell to 16s. 8d. we should be convinced that both causes had operated in producing the alteration of the relative value of these commodities." The supposition of invariableness in money when deer is assumed to rise to 3*l.* and salmon continues to sell for 1*l.* involves a contradiction of terms. For common sense assures us that the qualifications of an invariable standard must

be invariableness of purchasing power over the mass of commodities. But, by Mr. Ricardo's supposition, money (his standard) has not this invariableness of exchangeable power; for after fixing it at 1*l.* to a salmon and 2*l.* to a deer, he then assumes deer to rise to 3*l.*, making 4*l.* necessary to purchase the deer and salmon, after first supposing 3*l.* sufficient. Money can only be invariable in its value, when it maintains the same ratio to all other commodities. It is not essential to its invariableness that it should possess the same purchasing power over every particular commodity; but if it alters with regard to one, to maintain its integrity there must be an opposite alteration elsewhere. In the quotation, however, before us, Mr. Ricardo has not observed this; for he has supposed deer to rise to 3*l.* and salmon to remain at its former price, and afterwards deer to continue stationary, and salmon to fall to 13s. 4d.; and after that, deer to rise to 2*l.* 10s. and salmon to fall to 16s. 8d. In all which suppositions, money is necessarily invalidated from being a standard. The deception evidently arose from his supposing quantity of labour to be the cause of value, and money the measure obtained in this country. For were this true, and it required always the same producing labour, it would evidently always possess the same exchangeable value. But after what has been stated, I deem it abundantly obvious that quantity of labour is not the determinate cause of value, and there-

fore it will not be to any fixed quantity of labour that we are to look for an accurate and unchanging cause. In order to shew the exact effect of a 50 per cent. rise in the producing labour of deer, as supposed by Mr. Ricardo, let us suppose profits to have been 100 per cent., or that the nets, &c. to catch the salmon, were worth 10s., and the weapons to hunt the deer 1*l.*; in this case the cost price of a salmon will be 1*l.* and the cost price of a deer 2*l.* Let us further suppose a rise in the producing labour of deer of 50 per cent. Upon such a hypothesis, Mr. Ricardo has stated the price of deer would be 3*l.*; but this evidently invalidates money from being an invariable standard. Instead, therefore, of deer rising to 3*l.*, it would only rise to 2*l.* 5s., and instead of salmon continuing at 1*l.* as formerly, it would fall to 15s., and then 3*l.* would purchase one deer and one salmon, as before, and the profits of stock be equal in both these channels of industry. For salmon which cost 10s. in labour, or capital to procure, would yield a profit of 50 per cent. or 5s., making 15s. the natural value of salmon; and deer, which cost 1*l.* 10s. would yield, after the same rate, viz. 15s., constituting 2*l.* 5s. the cost value of deer. And this would be the precise effect of a 50 per cent. rise in the producing labour of deer on the relative value of deer and salmon, preserving the integrity of the standard. The same principles apply to Mr. Ricardo's supposing salmon falling to 13s. 4d.

and 16s. 8d., and deer rising to 2*l.* 10s. The supposition of invariableness in money amidst universal variation is very absurd.

Mr. Ricardo, by way of contrast to the doctrine which he has just stated, proceeds to observe, that "No variation in the wages of labour could produce any alteration in the relative value of these commodities," which is very true, if the proportion of fixed and circulating capital is the same; and this Mr. Ricardo has assumed. But it does not follow from thence that quantity of labour has any greater correctness as a criterion of value; because, if we suppose an universally increased difficulty in production, the relative value of commodities would continue as before, although their producing labour had been greatly augmented. Cost of production, however, as before defined, is an infallible cause of value; because as the two ingredients of which it is composed, viz. labour and the general productiveness of labour, or capital and profits, are great or small, as they exchange for many or few of the products of human industry, there can be no alteration in the productiveness of labour without an alteration in cost; and no scheme of value ever propounded can be a true scheme, unless it include the productiveness of labour jointly with quantity or value of labour.

SECTION IV.

In the last section Mr. Ricardo supposed the implements necessary to kill the deer and salmon equally durable, but he says, "In every state of society, the tools, implements, buildings, and machinery employed in different trades may be of various degrees of durability, and may require different portions of labour to produce them. The proportions, too, in which the capital that is to support labour, and the capital that is invested in tools, machinery, and buildings, may be variously combined." He then observes that those articles, which are produced by the same quantity of capital of equal durability, will not vary in relative value with a rise or fall of wages. Thus barley would not vary in reference to wheat, or cotton goods to cloth; but a rise or fall of wages would alter the relative value of wheat and cloth, and barley and cotton goods, commodities produced under different proportions of fixed and circulating capital. He proceeds, and at p. 31 thus observes—"*There can be no rise in the value of labour without a fall of profits.* If the corn is to be divided between the farmer and the labourer, the larger the proportion that is given to the latter, the less will remain for the former. So

if cloth or cotton goods be divided between the workman and his employer, the larger the proportion given to the former, the less remains for the latter. Suppose then, that owing to a rise of wages, profits fall from 10 to 9 per cent., instead of adding 550*l.* to the common price of their goods (to 5500*l.*) for the profits on their fixed capital, the manufacturers would add only 9 per cent. on that sum, or 495*l.*, consequently the price would be 5995*l.* instead of 6050*l.* *As the corn would continue to sell for* 5500*l.*, the manufactured goods, in which more fixed capital was employed, would fall relatively to corn or to any other goods in which a less portion of fixed capital entered. The degree of alteration in the relative value of goods, on account of a rise or fall of labour, would depend on the proportion which the fixed capital bore to the whole capital employed. All commodities which are produced by very valuable machinery, or in very valuable buildings, or which require a great length of time before they can be brought to market, would fall in relative value, while all those which were chiefly produced by labour, or which would be speedily brought to market, would rise in relative value." This paragraph, which is in fact a compendium of Mr. Ricardo's opinions as to the effect of a rise of wages on value under different proportions of fixed and circulating capital, is egregiously erroneous. For is it probable or natural to suppose the farmers would prove mere ma-

chines—that they would not exert themselves, when a rise of wages placed them under disadvantages compared with those who employed a less proportion of circulating, and a greater proportion of fixed capital? Is it to be expected, that a spell would paralyse the elastic price of agricultural produce, and chain it down in everlasting fetters indissolubly with quantity of labour; and that too under all variations in wages, and when the value of commodities from fixed capital was admitted to fall? Nothing so unnatural could possibly happen. For circulating capitalists would certainly upon a rise of wages demand a greater money value; and in consequence of competition, fixed capitalists would be obliged to lower the value of their products, and there would necessarily be such a rise of goods produced by circulating capital, and such a fall of goods produced by fixed capital, as would equalize profits and preserve the integrity of the standard. Dr. Smith's doctrine of a rise of value in consequence of a rise of wages was very erroneous; but Mr. Ricardo, in combating him, oscillated into the opposite extreme, not unfrequently the case, it being often very difficult to keep *in equilibrio*. The author of "A few observations on Political Economy" is the only one I know that has noticed the error, and I refer my reader to his Chapter on Value, as containing many excellent observations on this part of the subject. Neither in the writings of Mr. Mill nor of Mr. M'Culloch do I find any

under different Proportions of Fixed and Circulating Capital, assuming the ar of Fixed Capital equal to 5 per cent. on its total Value.

Capital.	SECTION 3. $\frac{3}{4}$ *Fixed and* $\frac{1}{4}$ *Quarter Circulating Capital.*	
0 0 Circulating Capital	£3000 0 0 Fixed Capital	£1000 0 0 Circulating Capital
0 0 Profits	300 0 0 Profits	100 0 0 Profits
	150 0 0 Wear and Tear of fixed Capital	
0 0 Total Product Value	£450 0 0 Total Product Value	£1100 0 0 Total Product Value
ore the Rise of Wages.		
3000 0 0	Fixed Capital ...	£3000 0 0
200 0 0	Profits on do. ...	300 0 0
3000 0 0	Circulating Capital	1000 0 0
200 0 0	Profits on do. ...	100 0 0
4400 0 0	Total Value,	£4400 0 0
ages on Value and Profits.		
0 0 Product Value from Circulating Capital *before* the Rise of Wages	£450 0 0 Product Value from Fixed Capital *before* the Rise of Wages	£1100 0 0 Product Value from Circulating Capital *before* the Rise of Wages
2 6 Product Value from Circulating Capital *after* the Rise of Wages, being a Rise of 2*l.* 8s. 9d. per per cent.	409 6 0 Product Value from Fixed Capital *after* the Rise of Wages, being a fall of 9*l.* 1s. per cent.	1140 14 0 Product Value from Circulating Capital *after* the Rise of Wages, being a Rise of 3*l.* 14s. per cent.
0 0 Wages	150 0 0 Wear and Tear	1050 0 0 Wages
2 6 Profit on Circulating Capital	£259 6 0 Profit on Fixed Capital	£90 14 0 Profit on Circulating Capital.
r the Rise of Wages.		
000 0 0	Fixed Capital ...	£3000 0 0
46 7 6	Profits on do. ...	259 6 0
00 0 0	Circulating Capital	1050 0 0
53 12 6	Profits on do. ...	90 14 0
00 0 0	Total Value	£4400 0 0
— arter the Rise of Wages.	Profits £8. 12s. 10d. per cent. after the Rise of Wages.	

notice of the error; indeed these gentlemen, though they have been incomparably clearer than Mr. Ricardo in their statement of the effect of a rise of wages on value under different proportions of fixed and circulating capital, have been by no means sufficiently clear. Their indiscriminate use of the essentially distinct suppositions, of money being home-produced and imported, has in my opinion thrown a veil of confusion upon the subject calculated much to annoy the inquirer after truth. The main heresy in the writings of Smith, which our modern school of economists so much reprobates, is his stating an equivalent rise in commodities to the rise in wages. This very heretical doctrine, Mr. Ricardo has very forcibly and very successfully impugned; but unfortunately for science, he has erected upon its ruins a theory far from being orthodox. As the effect of a rise or fall of wages on value and profits under different proportions of fixed and circulating capital, is both curious and important, and as the disciples of Mr. Ricardo have either overlooked the error or tacitly assented to it, Tables are annexed where it is conceived the true effects are stated.

In the first Table the whole capital of the state is assumed at 4000*l.*, profits at 10 per cent., and the wear and tear of fixed capital equal to 5 per cent. upon its total value; and it is subdivided into three sections. In the first section the whole capital is supposed to be in the pro-

value of 3000*l.* the amount consumed in wages. Any alteration therefore in the value of his commodities will spread over the whole value of 3300*l.* On the contrary, it is evident that the action will be upon 150*l.* only of goods produced from fixed capital under the circumstances of Section I. Table I.; because, if the fixed capitalist obtains this sum, he will not only get the usual profits of stock, but also replace the wear and tear of his fixed capital. This will explain why 150*l.* is stated in the Table as the product value from fixed, and 3300*l.* as the product value from circulating capital, before the rise of wages. The rate of profit will be 6*l.* 0s. 6d. per cent. both on fixed and circulating capital, for 3150*l.* the circulating capital: 189*l.* 15s. 5d. the profit:: 1000*l.* the fixed capital: 60*l.* 4s. 7d. the profit from it; the total money value remaining the same. For though the goods produced by circulating capital have risen as stated, from 3300*l.* to 3339*l.* 15s. 5d.; the goods produced by fixed capital have fallen from 150*l.* to 110*l.* 4s. 7d.; making a rise in the former and a fall in the latter of 39*l.* 15s. 5d. Profits are consequently depreciated 3*l.* 19s. 6d. per cent. in consequence of the 5 per cent. rise of wages, viz. from 10*l.* per cent. to 6. 0s. 6d. per cent. The rate would have been 6*l.* 5s. had there been no increase in the capital. But it will appear that 4000*l.* capital before the rise of wages produced what 4150l. is required to do after, and 4000*l.*: 4150*l.* :: 6*l.* 0s. 6d.: 6*l.* 5s. At Section 2

e and Profits, under different proportions of Fixed and Circulating Capital, assuming e Wear and Tear of Fixed Capital equal to 10 per cent. on its total Value.

CTION 2. *Circulating Capital.*				SECTION 3. *¾ Fixed and ¼ Circulating Capital.*						
	£2000	0	0	Circulating Capital	£3000	0	0	Fixed Capital	£1000	0	0	Circulating Capital
ar of	400	0	0	Profits	600	0	0	Profits	200	0	0	Profits
					300	0	0	Wear and Tear of Fixed Capital				
alue	£2400	0	0	Total Product Value	£900	0	0	Total Product Value	£1200	0	0	Total Product Value
alue before the Rise of Wages.												
... ...	£2000				Fixed Capital			£3000				
... ...	400				Profit on ditto			600				
ital ...	2000				Circulating Capital ...			1000				
... ...	400				Profit on ditto			200				
Total Value	£4800							Total Value £4800				
se of Wages on Value and Profits,												
from efore ges	£2400	0	0	Product Value from Circulating Capital *before* the Rise of Wages	£900	0	0	Product Value from Fixed Capital *before* the Rise of Wages	£1200	0	0	Product Value from Circulating Capital *before* the Rise of Wages
from after ages, 9l.	2458	10	0	Product Value from Circulating Capital *after* the Rise of Wages, being a Rise of 2l. 8s. 9d. per cent.	855	12	0	Product Value from Fixed Capital *after* the Rise of Wages, being a Fall of 4l. 18s. 8d. per cent.	1244	8	0	Product Value from Circulating Capital *after* the Rise of Wages, being a Rise of 3l. 14s. per cent.
	2100	0	0	Wages	300	0	0	Wear and Tear	1050	0	0	Wages
Ca-	£358	10	0	Profit on Circulating Capital	£555	12	0	Profit on Fixed Capital.	£194	8	0	Profit on Circulating Capital.
alue after the Rise of Wages.												
...	£2000	0	0		Fixed Capital ...			£3000	0	0		
...	341	10	0		Profit on ditto ...			555	12	0		
ital	2100	0	0		Circulating Capital			1050	0	0		
...	358	10	0		Profit on ditto ...			194	8	0		
Total Value	£4800	0	0					Total Value	£4800	0	0	
Profits £17. 1s. 6d. per cent. after the Rise of Wages.					Profits £18 10s. 5d. per cent. after the Rise of Wages.							

where the whole capital is supposed to be equally divided into fixed and circulating, the total money value remains the same as in Section I, and, as I have before observed, the amount of commodities also remains the same. Under these circumstances it will be seen that the rise of goods from circulating capital is 2*l.* 8s. 9d. per cent. and the fall of goods from fixed capital 17*l.* 17s. 6d. per cent., whilst the rate of profit is fallen to 7*l.* 6s. 4½d. per cent. Section 3 will be easily understood by the foregoing remarks; for on the supposition of ¾ of the whole capital being fixed, and ¼ circulating, goods produced by fixed capital fall only 9*l.* 1s. per cent., when goods from circulating capital rise 3*l.* 14s. per cent.; the rate of profit being reduced to 8*l.* 12s. 10d. per cent.

At Table II. a profit of 20 per cent. is assumed, with a wear and tear of fixed capital equal to 10*l.* per cent. on its total value; making the aggregate money value 4800*l.*; and if we suppose a corresponding increase in commodities, a real value of the same amount. Any sum of money, therefore, in this table, will have the same purchasing power as in the first; for though its aggregate sum is 4800*l.* instead of 4400*l.* as before, the amount of commodities is supposed equaliy increased, and consequently the ratio between them and money remains undisturbed. In the 1st section of this Table there is the same rise of goods from circulating capital (viz. 1*l.* 4s. 1¼d.) as in the corresponding

section of Table 1. The fall, however, of goods from fixed capital is very different; these goods are depreciated only 14*l.* 9s. 3d. per cent.; and 14*l.* 9s. 3d. : 1*l.* 4s. 1¼d. :: 3600*l.* the product value from circulating capital, : 300*l.* the product value from fixed capital. But the fall in the product value from fixed capital in the first Table is 26*l.* 10s. 3½d. per cent., it is therefore in the inverse ratio of profits and the ~~durability~~ wear & tear of capital. For when profits are 10*l.* per cent. and the wear and tear of fixed capital 5l. per cent. only, the fall is so great as 26*l.* 10s. 3½d. per cent. On the contrary, when profits are 20*l.* per cent. and the wear and tear of fixed capital equal to 10*l.* per cent. on its total value, the fall is only 14*l.* 9s. 3d. per cent. The rate of profit in this section is depreciated from 20*l.* to 15*l.* 13s. 3d. In the two remaining sections it will be observed that the rise of commodities from circulating capital is the same as in the corresponding sections of Table 1, whilst the fall of products from fixed capital varies inversely with their several amounts.

In Table III. I have assumed so large a profit as 100*l.* per cent. with a wear and tear of fixed capital equal to 50 per cent. on its value, in order to try the strength of the principle. And if a corresponding increase in production has taken place, the value of money will be the same in this as in the previous tables. But it may be again remarked, that it is not necessary to my theory that the value of money should

ofits, under different Proportions of Fixed and Circulating Capital, assuming d Tear of Fixed Capital equal to 50 per cent. on its total Value.

ng Capital.	SECTION 3. $\frac{3}{4}$ *Fixed and* $\frac{1}{4}$ *Circulating Capital.*	
0 0 Circulating Capital	£3000 0 0 Fixed Capital	£1000 0 0 Circulating Capital
0 0 Profit	3000 0 0 Profits	1000 0 0 Profits
	1500 0 0 Wear and Tear of Fixed Capital	
0 0 Total Product Value	£4500 0 0 Total Product Value	£2000 0 0 Total Product Value
re the Rise of Wages.		
£2000 0 0	Fixed Capital ...	£3000 0 0
2000 0 0	Profits on do. ...	3000 0 0
2000 0 0	Circulating Capital	1000 0 0
2000 0 0	Profits on do. ...	1000 0 0
£8000 0 0	Total Value	£8000 0 0
Wages on Value and Profits.		
0 0 Product Value from Circulating Capital *before* the Rise of Wages	£4500 0 0 Product Value from Fixed Capital *before* the Rise of Wages	£2000 0 0 Product Value from Circulating Capital *before* the Rise of Wages
10 0 Product Value from Circulating Capital *after* the Rise of Wages, being a Rise of 2*l.* 8s. 9d. per cent.	4426 0 0 Product Value from Fixed Capital *after* the Rise of Wages, being a Fall of 1*l.* 12s. 10$\frac{3}{4}$d. per cent.	2074 0 0 Product Value from Circulating Capital *after* the Rise of Wages, being a Rise of 3*l.* 14s. per cent.
0 0 Wages	1500 0 0 Wear and Tear	1050 0 0 Wages
10 0 Profit on Circulating Capital	£2926 0 0 Profit on Fixed Capital	£1024 0 0 Profit on Circulating Capital
r the Rise of Wages.		
£2000 0 0	Fixed Capital ...	£3000 0 0
1902 10 0	Profits on do. ...	2926 0 0
2100 0 0	Circulating Capital	1050 0 0
1997 10 0	Profits on do. ...	1024 0 0
8000 0 0	Total Value	£8000 0 0
he Rise of Wages.	Profits £97. 10s. 8d. per cent. after the Rise of Wages.	

be preserved in the different Tables, where there are various profits; my object being merely to shew the effect of an alteration of wages on value in the different sections, where there are different proportions of fixed and circulating capital, profits, or the productiveness of labour, remaining the same. As, however, the equality in the value of money may be easily preserved in all the Tables by supposing a corresponding alteration in the amount of commodities; we will suppose such an alteration in this Table as shall preserve the integrity of the standard. And the rise of wages under the circumstances supposed, will raise the commodities produced from circulating capital exactly as in the previous Tables; but the fall of products from fixed capital (as before stated) will be seen to vary inversely with the rate of profit and the wear and tear of fixed capital. In the last section of this Table there is the apparent anomaly of a fall of goods from fixed capital to the amount of 1*l.* 12*s.* 10$\frac{3}{4}$*d.* per cent., whilst the rise of the other description of goods is 3*l.* 14*s.* per cent. This anomaly, however, is but apparent; for upon inspection it will be discovered to arise from the product value of the fixed, exceeding the product value of the circulating capital, in consequence of the immense profit and the great wear and tear of fixed capital.

In Table IV. the assumption of the former proportion of fixed and circulating capital is altered into the same proportion of *product*

value produced *by* these different kinds of capital; and though the principles are the same in this as in the previous tables, the rise of wages operates in a different degree. For instance, in section 2, the products from fixed capital *fall* exactly as the products from circulating capital *rise*, viz. 3*l.* 19s. 2¼d. per cent., and the profits, instead of being reduced as in section 2, table 2, to 17*l.* 1s. 6d. per cent. only fall to 18*l.* 16s. 2¾d. per cent. This difference arises purely from the different proportions of fixed and circulating capital which concur in producing the products of the two tables. In the first and last section too, there is a less fall than in the corresponding sections of Table II. and precisely for the same reasons. It will moreover be remarked of this table, that in section 1 there is a total money value of 7000*l.*, in section 2 of 10,000*l.*, and in section 3 of 13,000*l.* But if we imagine a corresponding alteration in the amount of commodities, which we must do, the value of money will undergo no change.

It must further be observed respecting these tables, that in all of them fixed capital is assumed to be produced by such portions of fixed and circulating capital, that no alteration in its value is created by alterations in the value of the products of which it is composed; or what is the same thing, that whatever may be its fall arising from the proportion of fixed capital employed in its production, is its rise from the proportion of circulating capital employed to

TABLE IV.—*Shewing the exact Effect of a 5 per cent. Rise of Wages on Value and Pr*
Capital, assuming the whole national Product Value at £4000, Profits at 20 per c
per annum on its total Value.

SECTION 1.

⅓ of the Product Value from Fixed and ⅔ from Circulating Capital.

£3333	6	8	Fixed Capital	£2500	0	0	Circulating Capital
666	13	4	Profits	500	0	0	Profits
333	6	8	Wear and Tear of fixed Capital				
£1000	0	0	Total Product Value	£3000	0	0	Total Product Value

A Synopsis of the Total Value

Fixed Capital ...	£3333	6	8
Profit on ditto ...	666	13	4
Circulating Capital	2500	0	0
Profit on ditto ...	500	0	0
Total Value	£7000	0	0

The Effect of a Five per Cent. Rise

£1000	0	0	Product Value from fixed Capital *before* the Rise of Wages	£3000	0	0	Product Value from Circulating Capital *before* the Rise of Wages
916	1	8	Product Value from Fixed Capital *after* the Rise of Wages, being a Fall of 8*l.* 7s. 10d. per cent.	3083	18	4	Product Value from Circulating Capital *after* the Rise of Wages, being a Rise of 2*l.* 18s. 11¼d. per cent.
333	6	8	Wear and Tear	2625	0	0	Wages
£582	15	0	Profit on Fixed Capital.	£458	18	4	Profit on Circulating Capital.

A Synopsis of the Total Value

Fixed Capital ...	£3333	6	8
Profit on ditto ...	582	15	0
Circulating Capital	2625	0	0
Profit on ditto	458	18	4
Total Value	£7000	0	0

Profits £17. 9s. 7¾d. per cent. after the Rise of Wages.

SECTION

⅓ of the Product Value from Fixed a

£6666	13	4	Fixed Capital	£1
1333	6	8	Profits	
666	13	4	Wear and Tear of fixed Capital	
£2000	0	0	Total Product Value	£2

A Synopsis of the Total Value

Fixed Capital ...
Profit on ditto ...
Circulating Capital
Profit on ditto ...
Total Val

The Effect of a Five per Cent. Rise

£2000	0	0	Product Value from Fixed Capital *before* the Rise of Wages	£2
1920	15	10	Product Value from Fixed Capital *after* the Rise of Wages, being a Fall of 3*l.* 19s. 2¼d. per cent.	2
666	13	4	Wear and Tear	1
£1254	2	6	Profit on Fixed Capital.	£

A Synopsis of the Total Valu

Fixed Capital ...
Profit on ditto ...
Circulating Capital
Profit on ditto ...
Total V

Profits £18. 16s. 2¾d. per cent. after the Rise of Wages.

produce it. To say the least, this is not an unnatural supposition, and has saved me from a greater complexity of reckoning; and merely from a greater complexity, as any other supposition would not have affected the principles elicited.

If what has been developed in these tables be correct, the sentiments of Mr. M'Culloch and Mr. Mill must clearly be erroneous. In his "Principles of Political Economy, second edition, page 349, Mr. M'Culloch thus expresses himself:—"Now, suppose that commodities, instead of being wholly produced either by immediate labour, as in the first case; or wholly by equal quantities of immediate labour and of capital, as in the second; or wholly by fixed capital, as in the third,—are partly produced in the one mode and partly in the other, and let us see what effect this increase of 5 per cent. in the rate of wages would have on their relative values, supposing, as before, that the productiveness of industry continues constant. To facilitate this inquiry, let us distinguish these three descriptions of commodities by the Nos. 1, 2, and 3. Now it is quite evident that the rise of wages has affected No. 1, 2½ per cent. more than it has affected No. 2, and 5 per cent. more than it has affected No. 3. No. 1 must, therefore, as compared with No. 2, have risen 2½ per cent. in exchangeable value, and, as compared with No. 3, it must have risen 5 per cent.; No. 2 must have fallen 2½ per cent.

as compared with No. 1, and risen 2½ per cent. as compared with No. 3; and No. 3 must have fallen 5 per cent. as compared with No. 1, and 2½ per cent. as compared with No. 2. If wages, instead of rising, had fallen, the same effects would obviously have been produced, but in a reversed order." Thus Mr. M'Culloch states that No. 1, produced wholly by circulating capital, has risen 2½ per cent. in reference to No. 2, produced partly by fixed, and partly by circulating, and 5 per cent. in reference to No. 3, produced exclusively by circulating capital. In the second section of Table II. which exactly corresponds* with Mr. M'Culloch's hypothesis, it is stated that the rise of products from circulating capital is 2*l.* 8s. 9d. and the fall of products from fixed capital is 9*l.* 15s. per cent. in reference to money; and the rise of the former, compared with the latter, or the fall of the latter, compared with the former, is 12*l.* 3s. 9d. per cent. Mr. M'Culloch's division into three parts, Nos. 1, 2, and 3, does not alter the relative rise of No. 1 to No. 3; it merely introduces a fresh supposition, No. 2, goods produced in equal propor-

* It must be observed that the second section of all the three first Tables corresponds with Mr. M'Culloch's hypothesis as far as the aggregate proportion of fixed to circulating capital goes. Mr. M'Culloch did not appear to have been aware that any given rise of wages would operate differently on goods from fixed capital under different rates of profit. But if we compare the second section of the three first Tables, we shall see that the fall of goods from this species of capital varies, as stated in the text, inversely with the rate of profits and the durability of capital. Section 2 of Table II. is merely selected as exhibiting a medium profit.

TABLE V.—*Being an Analysis of Table 2, Section 2, and agreeing with Mr. M'Culloch's Hypothesis.*

No. 3. FIXED CAPITAL.	No. 2. HALF FIXED AND HALF CIRCULATING CAPITAL.		No. 1. CIRCULATING CAPITAL.
£1333 6 8 Fixed Capital.	£666 13 4 Fixed Capital	£666 13 4 Circulating Capital	£1333 6 8 Circulating Capital
266 13 4 Profits	133 6 8 Profits	133 6 8 Profits	266 13 4 Profits
133 6 8 Wear and Tear of fixed Capital.	66 13 4 Wear and Tear of fixed Capital		
£400 0 0 Total Product Value.	£200 0 0 Product Value.	£800 0 0 Product Value.	£1600 0 0 Total Product Value.

A Synopsis of the Total Value before the Rise of Wages.

Fixed Capital £1333 6 8	Fixed Capital ... £666 13 4		Circulating Capital £1333 6 8
Profits ... 266 13 4	Profits 133 6 8		Profits 266 13 4
	Circulating Capital ... 666 13 4		
	Profits 133 6 8		
Value ... £1600 0 0	Value £1600 0 0		Value £1600 0 0

Total Value from Nos. 1, 2, and 3, before the Rise of Wages, £4800.

The Effect of a Five per Cent. Rise of Wages on Value and Profits.

£400 0 0 Product Value from Fixed Capital *before* the Rise of Wages	£200 0 0 Product Value from Fixed Capital *before* the Rise of Wages	£800 0 0 Product Value from Circulating Capital *before* the Rise of Wages	£1600 0 0 Product Value from Circulating Capital *before* the Rise of Wages
361 0 0 Product Value from Fixed Capital *after* the Rise of Wages, being a Fall of 9*l.* 15*s.* per cent.	180 10 0 Product Value from Fixed Capital *after* the Rise of Wages, being a Fall of 9*l.* 15*s.* per cent.	819 10 0 Product Value from Fixed Capital *after* the Rise of Wages, being a Rise of 2*l.* 8*s.* 9*d.* per cent.	1639 0 0 Product Value from Fixed Capital *after* the Rise of Wages, being a Rise of 2*l.* 8*s.* 9*d.* per cent.
133 6 8 Wear and Tear of Fixed Capital	66 13 4 Wear and Tear of Fixed Capital	700 0 0 Wages	1400 0 0 Wages
£227 13 4 Profit on Fixed Capital.	£113 16 8 Profit on Fixed Capital.	£119 10 0 Profit on Circulating Capital.	£239 0 0 Profit on Circulating Capital.

A Synopsis of the Total Value after the Rise of Wages.

Fixed Capital £1333 6 8	Fixed Capital ... £666 13 4		Circulating Capital £1400 0 0
Profits ... 227 13 4	Profits 113 16 8		Profits 239 0 0
	Circulating Capital ... 700 0 0		
	Profits 119 10 0		
Value ... £1561 0 0	Value £1600 0 0		Value £1639 0 0

Total Value from Nos. 1, 2, and 3, after the Rise of Wages, £4800.

Profit on the Capital of Nos. 1, 2, and 3, after the Rise of Wages, £17. 1*s.* 6*d.* per Cent.

tions by fixed and circulating capital. But this will be better understood by an actual division of Table II. section 2, into Nos. 1, 2, and 3, as assumed by Mr. M'Culloch, and which I have annexed. By this table, therefore, it will appear that the same result follows, whether the supposition is, that all commodities are produced by ½ fixed and ½ circulating capital, as I have supposed in Table II. section 2; or that some of them are produced wholly by fixed and some wholly by circulating, whilst others are produced partly in the one mode and partly in the other, as hypothetically stated by Mr. M'Culloch. For we find on reference to the annexed table, that the goods produced under the circumstances of No. 2 remain stationary in their money value; for though I have in the table adopted the analytical plan, and separated the fixed from the circulating capital, whereby it appears that that portion of the value of goods derived from the fixed capital employed to produce them, has fallen, whilst that portion of the value of commodities which is created by the wages or circulating capital consumed in their production has risen, the fall of the one component part of their value is exactly balanced by the rise of the other, so that their compound character has undergone no change in its money value;* because a fall of 9*l.* 15s. per cent. on

* I regret that in consequence of the plan laid down of following Mr. Ricardo through his various sections, I am obliged here, as in many previous instances, to assume what I have endeavoured to prove

200*l.* is exactly neutralized by a rise of 2*l.* 8s. 9d. per cent. on 800*l.* We also find that the commodities produced wholly by fixed capital have fallen 9*l.* 15s. per cent. whilst those produced wholly by circulating capital have risen 2*l.* 8s. 9d. per cent. It cannot therefore be correct, as Mr. M'Culloch has stated, that No. 1 must have risen $2\frac{1}{2}$ per cent. in reference to No. 2, and 5 per cent. in reference to No. 3, for we find that No. 1 has risen 2*l.* 8s. 9d. per cent. compared with No. 2, and 12*l.* 3s. 9d. compared with No. 3. Mr. M'Culloch did not take any notice of the different rates of profit; but as the rate of profit in a great degree determines the product value from fixed capital, this is essentially necessary, in order to estimate correctly the effect of any given rise of wages on the value of commodities under different proportions of fixed and circulating capital. This omission, however, is not sufficient to account for the very great difference between us respecting the effect of the rise of wages on the value of goods produced by fixed capital. To account for this, Mr. M'Culloch must have indistinctly supposed that fixed, like circulating capital, was annually consumed, and that consequently there existed annually a product value

in the sixth section. The conditions, however essential to an invariable standard, do appear to me so very obvious, especially upon Mr. Ricardo's own principles in opposition to Adam Smith, that I do not calculate upon any inconvenience to the reader from the assumption.

equal to replace it and to furnish the ordinary profits of stock. This appears to me the only way of accounting for what I conceive an egregious error.*

But though there is a great difference between us as to the effect of a rise of wages on the value of such commodities as are produced by fixed capital, the difference is considerably less in regard to those produced by circulating capital. For it appears that the rise of goods from this species of capital is the same, whether profits are 10, 20, or 100 per cent. or the wear and tear of fixed capital equal to 5, 10, or 50 per cent. upon its value. The proportion of fixed to circulating capital appears therefore to be the only circumstance which determines the rise of goods produced immediately by labour only, when, on the contrary, the profits of stock, and the durability of fixed capital, are to be known and estimated before the exact effect of a rise of wages on value from this species of capital can be properly ascertained. Upon the previous data Mr. M'Culloch states that the rise of

* It may, however, be stated, that Mr. M'Culloch, instead of supposing proportions of fixed and circulating capital, as expressed by him, meant proportions of *commodities* produced by fixed and circulating capital. If so, Table IV. is an effectual reply; for in the second section it is there supposed, that one half the value of all commodities is produced by fixed, and one half by circulating capital. But it will be observed, that the money rise of the latter and fall of the former, is £3. 19s. 2½d. per cent.; so that, whether we understand Mr. M'Culloch as he has stated, or as it may be supposed he intended to state, it follows undeniably, in either case, that his error is both important and radical.

goods from circulating capital will be 2*l.* 10s. per cent. I have stated a rise only of 2*l.* 8s. 9d. per cent. This discrepancy however is easily explained, as it evidently arises from the increase of capital which the supposition creates. In the table to which I have before adverted, viz. Table II. section 2, which is in substance the same as what Mr. M'Culloch has assumed, the total capital before the rise of wages is 4000*l.* After the rise of wages, 4100*l.* is necessary to produce the same products; and 4100*l.*: 4000*l.*:: 2*l.* 10s. : 2*l.* 8s. 9d. I presume Mr. M'Culloch omitted to notice this increase, as it accounts for the difference. There is also a discrepancy in the rate of profit inferred from Mr. M'Culloch's statements and the rate I have stated; the former being 17*l.* 10s. or a fall of 2*l.* 10s. per cent., the latter 17*l.* 1s. 6d. or a fall of 2*l.* 18s. 6d. per cent. This may be explained as above, for 17*l.* 10s. : 17*l.* 1s. 6d.:: 4100*l.*: 4000*l.*

Mr. Mill's argument in his "Elements of Political Economy," is substantially the same as Mr. M'Culloch's. Indeed, the latter gentleman appears to have borrowed his example, as quoted above, from Mr. Mill.

A very important corollary may be made from the doctrines disclosed in this section, viz. that all the national products, such as cotton goods, &c. which are raised by a large proportion of fixed capital, fall by a rise in wages to a much greater degree than economists have previously supposed. This fall, however, is regu-

lated by the total amount which fixed bears to circulating capital, by the rate of profit and the durability of fixed capital; and before we can have any knowledge *a priori* as to the extent of this fall, the knowledge of all these circumstances must previously be obtained.

Another corollary is, that quantity of labour is not the determining cause of value; for if it were, no alteration could take place in the value of commodities without an alteration in the producing labour. And although I differ from Mr. Ricardo, Mr. Mill, and Mr. M'Culloch, as to the precise effect of any given rise of wages upon value, all these authorities admit such a change has an effect upon it, which appears to me very inconsistent with their maintaining that quantity of labour, in contradistinction to wages of labour, is the only cause of value. Mr. M'Culloch, however, allows in his "Principles," second edition, p. 352, "Though it may not be strictly true of a particular commodity, that its exchangeable value is directly as its *real* value, or as the quantity of labour required to produce it and bring it to market, it is most true to affirm this of the mass of commodities taken together." But, if true with regard to the mass, why should it not be true in reference to particular commodities? It is quite clear that alterations in the value of labour do not necessarily suppose alterations in the general productiveness of labour, or in the mass of commodities; and if they do not

suppose this, aggregate value cannot be altered by them; because value is commodities of which we assume neither an increase nor decrease. With regard to the mass of commodities, therefore, changes in the value of labour cannot have any effect; though they may alter the value of particular commodities, which Mr. M'Culloch admits in the above quotation. It is, therefore, very surprising this circumstance did not lead him to doubt the accuracy of his conclusions as to quantity of labour, and that it did not induce him more scientifically to analyze his cardinal principle.

Cost of production, however, as previously defined, viz. labour and the general productiveness of labour, or capital and profits, infallibly determines the value of commodities under all circumstances. It determines them as a *principium essendi* in the former case, and as a *principium cognoscendi* in the latter case. Labour and the general productiveness of labour determine or originally cause the value of all commodities; capital and profits expressed in money, determine them to our knowledge. We obtain a knowledge of the value of any commodity by knowing its money cost, but this money cost is not its original cause. Hence, when goods from circulating capital rise and goods from fixed capital fall, the money cost of production explains with particular perspicuity why this has happened. Of course, in an inquiry of this sort, economists naturally assume

first of all an equality of wages and an equality of profits, and also that the supply of commodities is precisely adjusted to the demand. And this being now assumed, cost of production infallibly causes value under every change in the wages of labour and in the productiveness of labour.

SECTION V.

Mr. Ricardo in this section again modifies his law that quantity of labour is the cause of value; it is, however, extremely unfortunate for the popularity and permanency of his doctrines that the exceptions to his rule are so extremely numerous. In previous sections he has stated that the difference of time in bringing commodities to market, and the varied proportions of fixed and circulating capital, allow of changes in the comparative value of commodities, without there being changes in their producing labour. As it is very true such alterations do take place, irrespective of alterations in the quantity of labour employed in the production of commodities, it must therefore be very *untrue* that it can be the cause of value; and yet Mr. Ricardo asserts it in the most unequivocal manner. The main object of his 5th section is

to urge a fresh exception to his rule, viz. that the varied degrees of durability of fixed capital modify "the principle that value does not vary with the rise or fall of wages." That the action of a rise or fall of wages on goods produced by fixed capital is different under different degrees of its durability is correct as Mr. Ricardo has stated. For if we inspect section 1 of Table 2, where the wear and tear of fixed capital is 10 per cent. on its value, the fall of goods produced by this species of capital is 14*l.* 9s. 3d per cent.; whereas by the annexed Table, where the wear and tear is assumed at 5 per cent. the fall is 17*l.* 7s. per cent. So that the fall is directly as the durability; for it is greatest where the wear and tear is least, and least where the wear and tear is greatest. It must be observed, however, that in both cases there must be an equal fall of 43*l.* 7s. 6d. to preserve the standard and the equality of profits;* and consequently the smaller the surface the rise of wages acts upon, the greater the per centage

* The reader must not suppose that the rate of profit is unaffected by alterations in the durability or efficiency of the fixed capital, in consequence of seeing a coincidence in the rates of the annexed and Table II. Because, as I have before remarked in the text, my object is not to ascertain the effect of alterations in production on the rates of profit; but to ascertain the effect of alterations in the wages of labour on the value of commodities produced by different proportions of fixed and circulating capital. It is very clear that money (the Standard) has a greater exchangeable power in this than in Table II. just to the degree of the increased efficiency of the fixed capital, in consequence of the assumed increase in its durability. In both Tables there appears the same money value, but the product value of the annexed is greater from the circumstance just mentioned.

TABLE VI.—*Shewing the exact Effect of a 5 per cent. Rise of Wag*
the whole national Capital £4000, Profits at 20 per ce

SECTION I.

¼ *Fixed and ¾ Circulating Capital.*

£1000	0	0	Fixed Capital	£3000	0	0	Circulating Capital
200	0	0	Profits	600	0	0	Profits
50	0	0	Wear and Tear of fixed Capital				
£250	0	0	Total Product Value	£3600	0	0	Total Product Value

A Synopsis of

Fixed Capital	...	£1000	0 0
Profits on ditto	...	200	0 0
Circulating Capital	...	3000	0 0
Profits on ditto	...	600	0 0
Total Value		£4800	0 0

The Effect of a 5 p

£250	0	0	Product Value from Fixed Capital *before* the Rise of Wages	£3600	0	0	Product Value from Circulating Capital *before* the Rise of Wages
206	12	6	Product Value from Fixed Capital *after* the Rise of Wages, being a Fall of 17*l.* 7*s.* per cent.	3643	7	6	Product Value from Circulating Capital *after* the Rise of Wages, being a Rise of 1*l.* 4*s.* 1¼*d.* per cent.
50	0	0	Wear and Tear	3150	0	0	Wages
£156	12	6	Profit on Fixed Capital	£493	7	6	Profit on Circulating Capital

A Synopsis of th

Fixed Capital	...	£1000	0 0
Profits on ditto	...	156	12 6
Circulating Capital	...	3150	0 0
Profits on ditto	...	493	7 6
Total Value		£4800	0 0

Profits £17. 1s. 6d. per Cent. after the Rise of Wages.

½ *Fi*

£2000	0	0	Fix
400	0	0	Pro
100	0	0	Wea fix
£500	0	0	Tota

A Synopsis of

Fixe			
Prof			
Circ			
Profi			

The Effect of a 5 p

£500	0	0	Prod Fixe the
441	10	0	Prod Fixe the bein 14s.
100	0	0	Wear
£341	10	0	Profi pita

A Synopsis of th

Fixed Capital			
Profits on ditto	...		
Circulating Capital	...		
Profits on ditto	...	358	10
Total Value		£4800	0 0

Rise of Wages.

will be. In Table II. section 1, the annual value to the fixed capitalists is 300*l.*, this sum yields them not only the ordinary profits of stock but also replaces the wear and tear of the fixed capital. In the annexed Table 250*l.* gives the fixed capitalists the ordinary profits of stock, because the wear and tear is only 5 per cent. on its value, and 300*l.* : 250*l.* :: 17*l.* 7s. : 14*l.* 9s. 3d. But notwithstanding it is true, as Mr. Ricardo asserts, that as capital is less durable, and approaches to the nature of circulating capital, a rise of wages will have a less effect, than when capital is more durable in its nature, he was evidently quite ignorant of its precise effects, as the following will shew, in addition to what has been before quoted. At p. 38 he observes, "I have already said that fixed capital is of various degrees of durability. Suppose, now, a machine which could in any particular trade be employed to do the work of 100 men for a year, and that it would last only for one year. Suppose too, the machine to cost 5000*l.*, and the wages annually paid to 100 men to be 5000*l.*, it is evident that it would be a matter of indifferenee to the manufacturer whether he bought the machine or employed the men. But suppose labour to rise, and consequently the wages of 100 men for a year to amount to 5500*l.*, it is obvious that the manufacturer would now no longer hesitate, it would be for his interest to buy the machine and get his work done for 5000*l.* But will not the machine rise in

price, will not that also be worth 5500*l.* in consequence of the rise of labour? It would rise in price if there were no stock employed on its construction, and no profits to be paid to the maker of it. If, for example, the machine were the produce of the labour of 100 men, working one year upon it with wages of 50*l.* each, and its price were consequently 5000*l.*; should those wages rise to 55*l.*, its price would be 5500*l.*, but this cannot be the case; less than 100 men are employed or it could not be sold for 5000*l.*, for out of the 5000*l.* must be paid the profits of stock which employed the men. Suppose then that only 85 men were employed at an expense of 50*l.* each, or 4250*l.* per annum, and that the 750*l.* which the sale of the machine would produce over and above the wages advanced to the men, constituted the profits of the engineer's stock. When wages were 10 per cent. he would be obliged to employ an additional capital of 425*l.* and would, therefore, employ 4675*l.* instead of 4250*l.* on which capital he would only get a profit of 325*l.* if he continued to sell his machine for 5000*l.*; but this is precisely the case of all manufacturers and capitalists; *the rise of wages affects them all.* If, therefore, the maker of the machine should raise the price of it in consequence of a rise of wages, an unusual quantity of capital would be employed in the construction of such machines, till their price afforded only the common rate of profits. *We see then that machines would*

not rise in price *in consequence of a rise of wages.*" This passage is quite as erroneous as that upon which I have animadverted in the previous section. There are two points in it radically wrong, viz. the assertion and the argument. With respect to the assertion that the machine produced exclusively by labour would not rise with a rise of labour, I deem it unnecessary to say further, as the Tables shew clearly that under such circumstances it would rise. If the argument brought forward to support the assertion were true, I admit there would be some force in what Mr. Ricardo states. His very supposition, however, confutes the argument; since the manufacture of a machine, supposes a fixed capitalist, a machine itself being fixed capital; it must therefore follow that all capitalists are *not* affected by alterations in the value of labour, because fixed capitalists are not; and, therefore, so far from an unusual quantity of labour being invested in the construction of such machines in case their price should rise, an unusual quantity of capital would infallibly be abstracted from the manufacture of them in case they did *not* rise, or else there would be the anomaly of a diversity of profit in the two channels of industry: this, however, Mr. Ricardo and all economists deny. The commodities produced by circulating capital would continue stationary and the equality of the profits be still preserved, if the commodities produced by fixed capital were to fall so as

to reduce profits to the level at which Mr. Ricardo imagines them to be after his hypothetical rise of wages. A fall, however, of these goods without a rise of such as are produced by circulating capital supposes a rise in the value of money, the absurdity of which has been before sufficiently noticed. Mr. Ricardo concludes with the following: "It appears that in proportion to the durability of capital employed in any kind of production, the relative prices of those commodities on which such durable capital is employed, will vary inversely as wages; they will fall as wages rise, and rise as wages fall; and, on the contrary, those which are produced chiefly by labour with less fixed capital, or with fixed capital of a less durable character than the medium in which price is estimated, will rise as wages rise, and fall as wages fall." This is an absolute contradiction to the previous quotation, if money is the medium in which he estimates the rise and fall of commodities. Because in the previous passage he states, without any kind of modification, that commodities produced from circulating capital will not rise. In this, however, he states there will be a rise compared with such as are produced "with fixed capital of a less durable character than the medium in which price is estimated." It must, therefore, mean not a rise in money, but a relative rise compared with some other commodity. For instance, cotton goods, produced by durable fixed capital upon a rise

of wages will fall in money price, while, according to Mr. Ricardo's view, shoes produced by circulating capital will remain the same in money value after a rise of wages. But, though in reference to money, they continue stationary; in reference to cotton goods, they have risen. When, therefore, Mr. Ricardo makes use of the verb "rise" in the above passage, he must not mean a rise in reference to money, but a rise in reference to such goods as have fallen in money value. This is the only construction which can be put upon it to avoid a contradiction. It is, however, difficult to understand Mr. Ricardo's meaning, and much of that difficulty, in my opinion arises, as in many other instances, from his mixing up together the essentially distinct suppositions—of money being a home produced, and imported commodity. But I shall have occasion to investigate this opinion at length in the following section. In the mean time it must be observed that both Ricardo, Mill, M'Culloch, and myself, all agree that if price is estimated in a commodity produced in this country, goods will rise or fall upon a rise of wages, according to the proportions of fixed and circulating capital required to produce them. At least we agree there will be *a* rise of goods from circulating, and *a* fall of goods from fixed capital, but as to the *exact* rise or fall we widely differ. We also differ with regard to the money value of commodities, money being an imported commodity: these gentlemen stating that commo-

dities produced by circulating capital will not rise in money value upon a rise of wages, when I maintain they will rise. But every one of us *in toto* differs from Adam Smith, and unanimously repudiates his doctrine of an *equivalent* rise in goods to the rise of wages.

SECTION VI.

Many remarks in this section have been anticipated by the reasonings of the previous sections; the subject, however, is one of the greatest importance, and has baffled the efforts of men of no mean capacity; it may therefore be expedient to investigate the matter further. Economists are divided into three classes as it regards this subject.

The 1st Class consider a standard of value quite unattainable.

The 2d Class, comprising Dr. Smith and Mr. Malthus, esteem corn and labour, either jointly or separately, a perfect standard of value.

The 3d Class, or those who think with Col. Torrens and the Author of the "Critical Disser-

tation," &c. not only consider a standard of value unattainable, but that the very supposition of one involves contradictory conditions.

What I shall remark on this disunanimity of opinion, will be embodied under the two following capital heads:—

1st, in examining whether a contradiction is or is not involved in the supposition of a standard of value; and

2dly, in stating the necessary conditions of a perfect standard.

1st then, the Author of the "Critical Dissertation," &c. at p. 110, says, "The phrase, in variable measure of value, proves to be absolutely destitute of a basis of meaning;" and at p. 119, after quoting Mr. Ricardo's opinion that it is impossible to be possessed of a commodity that is not subject to the variations of other things, observes, "The supposition of such a commodity, for such a purpose, involves contradictory conditions," and in many other places of the Dissertation, the very assumption of a measure is either stated to be without the shadow of a meaning, or else to be absurd and contradictory. Col. Torrens too, in his work "On the Production of Wealth," is much of the same opinion, as p. 65 will testify; for he remarks, "we cannot, without involving ourselves in contradiction and absurdity, conceive the possibility of an abstract or ideal standard." If an invariable standard of value meant invariability with respect to every particular com-

modity, then the supposition of a standard to measure the fluctuations in other things does involve contradictory conditions, and I cordially agree with the above authors. No such thing however is meant by the term; for economists and people in general seemed principally desirous for a standard of value, in order to ascertain the value of incomes at different periods of time, and this could not be obtained if, by standard, we meant invariability to every particular commodity. Thus, if in 1810 I had an income of 100*l.* per annum, with which I purchased, in certain proportions, some of the necessaries, conveniences, and luxuries of life; and if in 1820 I had the same income consumed in a similar manner, I should, it appears to me, be justified in saying the value of my income had not altered, if I could purchase the same *aggregate* amount of necessaries, conveniences, and luxuries, at the latter, as at the former period. It would not matter to me that necessaries at the first period should cost me 40*l.* and conveniences and luxuries 60*l.*; and at the latter period, that necessaries should cost me 50*l.* and conveniences and luxuries 50*l.*; because my income would remain the same: since in either case 100*l.* would purchase me the same aggregate amount of necessaries, conveniences, and luxuries. In like manner the value of money, both in England and France, might be the same, and yet command a very unequal quantity of particular commodities. In Eng-

land, for instance, money might be cheap in reference to raw produce, and to all goods in which raw produce might be the principal ingredient; but it might be dear in reference to products in the production of which mechanical invention has been applied; and these comprise most of the conveniences and luxuries of life. On the contrary, money in France might be dear as compared with raw produce, and cheap as compared with manufactured goods; but the circumstance of the same commodity being dear in France and cheap in England, or cheap in France and dear in England, does not invalidate the supposition of money possessing the same purchasing power in both countries, contrasted with the whole range of commodities. And therefore nothing contradictory is involved in the hypothesis of an invariable standard, amidst variations in other things. The critical author, at p. 5, observes, "it would be an absurdity to suppose, that the value of A. to B. could alter, and not the value of B. to A.; that A. could rise in value to B., and B. remain stationary in value to A.; an absurdity of much the same kind as supposing, that the distance of the earth from the sun could be altered, while the distance of the sun from the earth remained as before." It is clearly a gross absurdity to suppose, as stated by this author, that the value of one thing can alter, without altering the value of that other thing with which it may be compared. Thus corn cannot alter in value to

cloth, without cloth altering in value to corn; and if corn and cloth were the only two commodities in existence, the supposition of either being a standard of value would be ridiculous in the extreme. But the value of corn or cloth is not exclusively formed by their mutual power over each other. Corn, for instance, has an exchangeable power over every commodity; cloth has the same exchangeable power. The value of corn, therefore, might fall or rise in reference to cloth; but if it altered in the same degree in an opposite direction with some other commodity, its exchangeable worth would remain the same, though it had varied compared with cloth. For value, it must be again observed, means a power vested in a commodity of exchanging for other commodities, not for a particular commodity. If the general value of A. were altogether regulated by its power over B., A. must of necessity alter by alterations in B., as B. must alter by alterations in A. As things however actually exist, a variation in the value of one commodity compared with another, does not *necessarily* alter its value compared with *all* commodities, and therefore by no means invalidates the supposition of an invariable standard of value.

But the author just quoted endeavours to support his argument by a simile drawn from astronomy, which would have considerable weight did we grant that the value of one commodity was entirely formed by its power over

another commodity, and that the distance of the earth from the sun was calculated from any specific part of its orbit; this, however, is not the case. If the orbit were circular, it would be so; but it is very elliptical. Astronomers therefore give the *mean* distance, which is 96 millions of miles. But at the aphelion the distance considerably exceeds 96 millions; at the perihelium it falls far short of it: an average therefore is taken, and this forms the 96 millions. The average distance therefore might continue the same, though particular parts of the earth's orbit should alter. Should the aphelion be removed further from, just as the perihelium was brought nearer to the sun, or *vice versa*, the mean distance might continue exactly as before. In like manner, the aggregate distance of our sun from the fixed stars might continue stationary, and yet its distance might be altered compared with *some* stars. Sirius, for example, might be brought nearer to our sun, either by an impulse originating in itself, or by an impulse originating in our sun. But if there were an opposite alteration in the sun's relative distance to Arcturus or any other star, it might still bear the same aggregate relation of distance to all. I cannot therefore imagine the slightest contradiction involved in the supposition of an invariable standard;* though Mr.

* Mr. Malthus, in his "Definitions in Political Economy," has some very sensible remarks on this subject.

M'Culloch, by his observation at p. 214 of his "Principles," appears to be a convert to this author's opinions. I therefore proceed,

2dly, to investigate the conditions necessary to an invariable standard; and first, the conditions economists themselves have proposed, and these are very numerous. We will begin with Mr. Ricardo's. In his section on an invariable standard, he sets out with stating that it would be extremely desirable to possess a measure of value; but this he considers impossible, not only on account of the constant fluctuations in the producing labour of every commodity, but also on account of the difference of time in bringing commodities to market, added to the various proportions of fixed and circulating capital, and the different degrees of the durability of fixed capital, which concur in producing them. Thus, if wheat were the standard, and an invariable quantity of labour employed to produce it, according to Mr. Ricardo's theory it would only be a perfect standard for all commodities produced under similar circumstances. It might be a perfect standard for the value of barley, but it would be no measure of the value of cloth or cotton goods. Invariableness in the quantity of labour, however, under any circumstances as the condition of a standard, the critical author of the "Dissertation," &c. has abundantly confuted. Indeed, it is as absurd as invariableness in the capital or in the common wages of labour. They are all

fallacious causes of value, and therefore can never be invariable standards.* Corn and labour also, the standard of value propounded by Adam Smith, are quite as erroneous as quantity of labour, Mr. Ricardo's standard; for we never can accurately know the value of any commodity by a mere knowledge of the quantity of corn or labour it will purchase; and therefore they cannot with any propriety, either jointly or separately, be called measures of value. Respecting the standard of value which has issued from the ingenious pen of Malthus, I refer my readers to the "Critical Dissertation," &c. and to the Templar's Dialogues on Political Economy which appeared in the London Magazine for May, 1824. But it will be asked, what are the essential conditions of a perfect standard of value? I have before stated what I conceive to be the cause of value, viz. cost of production; the condition, therefore, essential to an invariable standard, is invariability in the cost of its production. Gold is the standard of the British nation, and an ounce of it is coined into such a sum of money as we call 3*l.* 17s. 10½d. But it is not a perfect standard, because it does not maintain the same relation to all other things; if from century to century, and at all times, it preserved a unity

* This Section appears to have been added by Mr. Ricardo in the third edition; it is much to be regretted that the whole chapter was not re-modelled.

of relation to all commodities, it would be a perfect standard; this, however, is not the case. I shall however econsider money as the standard;

1st. As if obtained in this country.

2ndly. As it is actually obtained.

1st. Assuming money to be obtained in this country, the very supposition of it as a standard, involves a contradiction of terms; because its value would necessarily alter with every variation in other things, unless with a variation in one commodity an opposite and equivalent alteration occurred in some other. A variation in one commodity, however, will not ensure an opposite variation in another; so that the very hypothesis involves one of the grossest absurdities. Supposing gold were invariable in its producing labour and were obtained in this country, it would measure the producing labour of all commodities obtained by the same proportion of fixed and circulating capital, &c. and would be infallible in this way; and if quantity of labour were the cause of the value of these commodities, it would be an infallible measure of value for them at all times. Quantity of labour, however, I trust has been sufficiently proved not to be the cause of value under any circumstances; and I refer my readers to the "Critical Dissertation," &c. for a very lucid and complete confutation of invariableness in the quantity of labour having any thing to do with the qualifications of an invariable

standard of value. But the case is very different,

2ndly. As money is actually obtained.

For in this case, the supposition of it as a standard involves, as I conceive, no contradiction whatever. It would clearly involve a contradiction, if there were an equivalent rise in goods to the rise in wages as Smith maintains, or an equivalent alteration in their price to alterations in their producing labour, as most economists maintain; but I hope my strictures upon the doctrines of economists in the previous sections of this work, have removed all scepticism about aggregate money value being necessarily altered by alterations in wages, and *not* altered by alterations in the productiveness of labour. It may, however, be necessary to trace the operation; and first as to a rise in wages. A rise of wages in this country could not necessarily alter the value of goods generally; it might alter them specifically; for instance, it would alter the value of those goods which were produced by circulating capital. An individual, who employed a good deal of labour, would necessarily upon a rise of wages demand a greater price, and a greater price he would obtain, unless all commodities were produced by circulating capital; which could not be the case. In the constitution of the most barbarous commercial fabric, there must be a certain proportion of fixed capital, though variously distributed in production. A rise of

wages, therefore, would not affect all commodities equally. It would raise goods from circulating capital, just as it lowered those from fixed capital. Let us suppose, for example, that the goods we usually sent out for gold, were those in the production of which there was a large proportion of circulating capital; a rise of wages in this country would increase their price. But those who adopt the opinions of Mr. Ricardo might ask why should other nations give us more gold for our goods in consequence of our wages rising? I answer, because the circulating capitalists must have the ordinary profits of stock; which they could not have unless their goods sold at a higher price. Therefore, if the exporters of gold could get our commodity any where else at the old value, then, of course, we are excluded from that market. For not to sell their commodities at a higher price would be, on the part of circulating capitalists here, a gratuitous abandoning of the ordinary profits of stock. The ultimate effect, therefore, would be an abstraction of capital from the production of those particular commodities which were formerly sent for gold, into another channel of circulating capital, or else it would be invested as fixed capital in the production of such goods as had consequently fallen in value, and which would be exported in greater abundance to obtain for us that supply of gold, which we were prevented from having in the first quarter

in consequence of the rise of goods from circulating capital. Now if a rise of wages should raise all goods, as Smith asserts, those nations with which we traded would certainly purchase fewer of our commodities, and we should be obliged to export gold, and this would reduce prices to their former level. If goods from circulating capital were to continue at the same price, and those from fixed capital to fall upon a rise of wages, as Mr. Ricardo says, then there would be a freer export of those reduced commodities, and the ultimate result would be an importation of gold and a rise of prices, as I have stated in a previous section. An alteration, therefore, in the wages of labour, could make no alteration in the general value of gold, and consequently the supposition of it as a standard during the fluctuations of wages is by no means contradictory, but very natural; for the supposition of money as a standard under the influence of this circumstance alone is not only superior to any thing we can have, but almost as good as we can conceive. A fall of wages would have a contrary effect.

Nor, secondly, would changes in the productiveness of labour incapacitate money from being a standard. Money is a commodity which will flow to the best market; hence it is very equally distributed over the surface of the globe; and abating small variations arising out of the difference of distance from the mines and the difference in the bulk and weight of the

commodity usually remitted; its value is much the same in all nations.* This, therefore, being understood, upon any very great increase in the powers of production, what say economists? "An equivalent fall in commodities." This, however, is impossible, as an increase in the

* If the doctriue in the text is true, the theory of Mr. Senior, Professor of Political Economy in the University of Oxford, in his "Lectures on the cost of obtaining money," must be essentially untrue. If I understand the theory correctly, it is this—that the differences in the money value of labour in various countries do not arise in consequence of the "different degrees of labour requisite to obtain the necessaries of the labourer," nor "of the different densities of population," nor "of the different pressure of taxation," nor "of the different rates of profit," but that they are caused and regulated by the difference in the productiveness of labour. Thus the labourer in Hindostan receives less money wages than the labourer in England, and the labourer in England less than the labourer in America. In accordance with this theory, he supposes the price of commodities, generally, depends upon the money wages of labour; for he remarks, "The inventions of Arkwright and Watt, by making English labour ten times, or more than ten times as efficient in the production of exportable commodities, doubled, or more than doubled its value in the foreign market, and reduced to one-half, or less than one-half, the cost in England of obtaining the precious metals." This reasoning appears to me erroneous; for if we imagine it true, some future Arkwright or Watt may arise and lower the cost of obtaining the precious metals to ½ or 1/10 of their present cost. Thus, if we suppose no corresponding improvement in other countries, we shall have the anomaly of goods being here 5, 10, or 20 times dearer than in other countries, which is absurd. Mr. Senior too, in my opinion, lays an undue stress on obtaining the precious metals cheap, or, in other words, of having commodities dear. But getting money cheap is of much less importance than getting other commodities cheap; because obtaining commodities cheap, is advantageous on account of its giving the same amount of consumable products to the purchaser, at a less cost. But obtaining money cheap is not advantageous in the same manner. For though a man's income be increased from £100 to £200 annually, if the £200 will only purchase the same amount of commodities when they are are dear, as £100 would when they are cheap, of what advantage is it to have £200 instead of £100?

productiveness of labour would certainly cause an increased export of goods and an extra import of the precious metals, which would infallibly restore the old level of prices if they were for a moment deranged. I admit there would be a fall in some goods, though not an equivalent fall; there would, however, be such a rise elsewhere that the general range of prices would continue undisturbed. Supposing the goods sent directly for gold and silver remain the same in their producing labour, and those only alter which are sent to other parts, there would naturally be a greater export of them, and the exchanges would become favourable; this would be followed by an influx of the precious metals and a general rise of prices, at least to such an extent as would balance the particular depression in those channels where labour had been abridged; there could not be an elevation any where exceeding this. Again, if the producing labour of those commodities, which are directly exported for gold, be abridged, then the effect is immediate, and an increased importation of the precious metals at once takes place. But it must be observed, that the effect of alterations in the wages of labour, and alterations in the productiveness of labour, is very different in its influence upon the total mass of money necessary for the circulation of commodities. In the former case, neither more nor less money is required to transact the business of commerce and manufactures; for though one set

requires more, another set requires just as much less.* But in the latter case, notwithstanding the general range of prices remains the same, the aggregate mass of commodities is increased. There are more corn, more hats, shoes, &c. produced, and consequently more money required to circulate them, but the general range of prices may not be altered. If a fall equivalent to the improvement in the production of commodities were to take place, an additional supply of money would not be required. This equivalent fall, however, could not happen without leading to the gross absurdity of goods possibly being in this country ½, ¼, or 1-10th of their money value in any other country. Alterations, therefore,* in the productiveness of labour, would not necessarily for long periods of time alter the value of the precious metals, and therefore this circumstance does not prevent us from supposing them an invariable standard of value. Nor thirdly, would the incidence of a tax operate to our prejudice in altering the value of money; though most economists have stated as much. But that an equal rise in goods should follow the imposition of a tax, appears quite as unreasonable as the equivalent rise which is stated would follow an increased difficulty in the productiveness of industry, and which is equally

* It must be understood, that I am throughout speaking of the permanent effects—not of the temporary or accidental.

as absurd as the equivalent falls before noticed. But it may be imagined that many practical objections might be urged against this doctrine, and England produced as an instance to support them. But the general range of prices cannot be higher in this than in any other kingdom of the earth, at a similar distance from the precious metals, or we should not be able to sail paramount on the seas. It is true our raw produce is dearer, and many commodities also, in the production of which there is a large proportion of raw produce; the inventive genius, however, of Watt, of Peel, of Spode, and of that host of great names which stand as rich gems in the commercial history of this country, has more than balanced the disadvantages under which we might be supposed to labour from the circumstance of the agricultural productions of the kingdom being at a high price. If, however, taxation had really the effect ascribed to it, would it be possible for us to compete with other nations; could we possibly have ships freighted with British goods on every sea? The imposition or remission of taxes may have a particular influence on the value of particular goods,* though not an influence equal to

* In his chapter of "Taxes on Profits," Mr. Ricardo states that the imposition of a Tax on Profit, would not affect in the same proportion the value of commodities produced under different circumstances of fixed and circulating capital, which is very true. But he also states what is not true, that changes in the value of money will affect in a different manner the value of commodities in those countries which are taxed, than in those countries which are untaxed; and then

the imposition or remission, without involving absurdities which have before been noticed.

puts the query, "Will not this principle account for the different effects, which it was remarked were produced on the prices of commodities, from the altered value of money during the Bank Restriction?" Certainly not, as the relative value of commodities produced by different proportions of fixed and circulating capital, in a taxed country, will maintain the same ratio to each other after, as they did before the alteration in the value of money, as will appear obvious by the underneath statement. I take Mr. Ricardo's own hypothesis.

Before the Tax on Profits of £10 per cent., Profits being 20 per cent.

Previous to the rise of money.		*A 10 per cent. rise in the value of money.*	
Fixed Capital.	Circulating Cap.	Fixed Capital.	Circulating Cap.
£8000	£2000	£7200	£1800
	400 Profit		360 Profit
£1600 Profit	£2400	£1440 Profit	£2160
Total product value	£4000	Total product value	£3600

The Tax of £10 per cent. on Profits, Profits being 20 per cent.

Previous to the rise of money.		*A 10 per cent. rise in the value of money.*	
Fixed Capital.	Circulating Cap.	Fixed Capital.	Circulating Cap.
£8000	£2000	£7200	£1800
	400 Profit		360 Profit
£1600 Profit	40 Tax	£1440 Profit	36 Tax
160 Tax		144 Tax	
£1760	£2440	£1584	£2196
Total product value	£4200	Total product value	£3780

Thus we clearly see, that whether a country be taxed or not, a change in the value of money will affect equally the value of commodities produced both by fixed and circulating capital. For in the first Table, where we have supposed no taxation, both the products from fixed and circulating capital maintain the same relation to each other after, as they did before the change in the value of money; so in the second Table, where taxation is assumed, there is the same undisturbed ratio subsisting; for £1600 : £2400 :: £1440 : £2160, in like manner £1760 : £2440 :: £1584 : £2196. Consequently, though Mr. Ricardo stated correctly that the imposition of a tax would not operate equally on the value of goods produced by fixed and circulating capital, he was incorrect in saying, that "in a country where prices are artificially raised by taxation, the abundance of money from an influx, or the exportation and consequent scarcity of it from foreign demand, will not operate in the same proportion on the prices of all commodities," because we have shewn that they would alter in the same proportion whether taxation did or did not exist.

The precious metals insinuate themselves into the pores of the universal system, in exchange for pretty equal equivalents, and it would be strange they should have a less purchasing power in England than in other countries, because our municipal laws might require heavy contributions to the state.

It follows, therefore, that changes in the wages of labour, and in the productiveness of labour, and that the imposition of taxes in England, do not, as far as they go, alter the value of the precious metals; and having premised thus much, I proceed to state the conditions necessary to make money a perfect standard, as it is actually an imported commodity; and this condition is, as we have before stated, *invariableness in its cost of production.* Therefore, in any or in all the countries where we procure the supply of our gold and silver, it will not only be necessary (to constitute them a perfect standard of value) that *they* are stationary in their producing labour, but it will also be necessary that all other things be stationary too; and that the productive powers of labour and capital continue immoveable. For cost means *labour and the general productiveness of labour;* so that if the general productiveness of labour alter, one ingredient in the cost, cost will infallibly alter. Consequently, if our supply of gold were from South America, in order to constitute it a perfect standard, the labour and capital employed in its production must not

only be invariable, but the labour and capital in all other channels too. The wages of labour also must be invariable: because it has been demonstrated, that in consequence of the various proportions of fixed and circulating capital employed in the production of all goods, any change in the wages of labour will necessarily alter the relative value of goods produced under different circumstances of fixed and circulating capital. It will, therefore, be very readily believed that a perfect standard of value is unattainable; though the propriety of conceiving one, I think, cannot fairly be disputed.

It may, however, be useful to state the effects upon the value of gold, which alterations in the wages of labour, in the producing labour of other commodities, and in its own producing labour, will create. And for the sake of greater clearness, let us suppose gold produced in South America only, and that therefore our supply is obtained exclusively from that quarter; and first, as to the influence of a rise of wages on the value of gold generally, supposing it is produced by fixed capital.

According to the principles already developed, a rise of wages would evidently cause a fall in the value of gold in reference to all those commodities which were either produced altogether by circulating capital, or which required a greater proportion of circulating capital to produce them than gold, the commodity compared; but the degree of fall would evidently

be governed, as has been before elucid ated, by the rate of profit, and by the proportion which the whole fixed capital of the state, bore to the whole circulating capital &c. We cannot, therefore, know the precise fall unless we know all these circumstances. It is, however, very plain that there would be *a* fall in reference to all those goods produced in South America by capital of a less durable kind. And it will be very easy to prove that a rise of wages under these circumstances would cause a fall in gold or a rise in commodities all over the world; benefitting all debtors, and injuring all creditors. Nor would the fall of gold be in reference to those commodities merely which were produced altogether by circulating capital in other countries, or by capital of a less durable nature than itself; it would fall in reference to all kinds of foreign commodities. In the national interchange of goods, the parties contracting do not stipulate about proportions of fixed and circulating capital; the goods undergo no analysis of this sort. The American mineralist would be obliged to put up with a less quantity of all other goods in exchange for his commodity; and the merchants of other countries would refuse to give the ancient price. Had the mineralist the monopoly of his article, then he might insist upon the same price as formerly, but he is exposed to the rivalry of other capitalists, and were he to receive the same amount of foreign productions as formerly, he would gain

more than the usual profits of stock, and that would incite other capitalists to embark in the same enterprise, and competition would soon reduce the value of gold to such a level as would only afford the common profits of capital.

On the contrary, if gold in South America were produced by circulating capital, a rise of wages would increase its value, compared with all those goods in that country which were produced by a less quantity of this species of capital; but it would continue stationary compared with those produced under the same circumstances as itself. It would, however, rise in reference to *all* commodities of other nations, whatever might be the proportion of fixed and circulating capital that conduced to produce them. Because its commanding power at home being increased, and profit being measured by this commanding power, the common profits of stock could not be obtained without an equivalent fall of commodities all over the world. Should wages decline in value, that circumstance would cause a contrary effect.

Again; supposing the producing labour and capital of gold remained stationary in South America, and there was a general improvement in production in all other channels, gold would rise compared with all other things, not only in that country but every where else. It is sometimes very difficult to trace the exact operation of the clearest principles, but as to the general result, it must be obvious, that if the value of

gold is increased where it is produced, it will also be increased elsewhere. Both the importer and exporter of every species of goods must have the common profits of stock in the country where this importation and exportation takes place. In all reasonings of this sort, therefore, this is supposed to be admitted. Then let us imagine that we export cotton goods, woollen cloths, and all kind of hardware commodities to South America, and that we get in return the precious metals, hides, &c. &c. By the supposition, hides, and all commodities except gold and silver, are reduced in their producing labour; they will consequently sell for less money in their own country, and in other countries also. For if the exporters of hides, &c. were to obtain the old prices, they would gain more than the common profits of stock. And, did we sell our goods for less money, at first, we should not obtain the ordinary profits, unless all commodities in our own country were reduced in a corresponding degree. This, however, eventually would be the case; for many goods which we might have sent previous to the increased productiveness of South American labour at a lower cost than they could have produced them, after the improvement, they might be able to obtain themselves; we, therefore, should be turned out of the market as respects these goods. The same principle would be in active operation in all other countries; for it would be discovered,

that in reference to a considerable quantity of foreign goods, the South Americans would be able to produce cheaper than they could import. The common export of the precious metals would therefore be suspended *pro tempore;* and the general scarcity of money arising from this circumstance would soon produce a depression in the price of goods all over the world. Nor would it be a temporary, but a permanent depression. This circumstance is curious, and I believe has never before been stated; but it is true upon the principles of the economists themselves. We, therefore, see that though the producing labour of gold remains stationary, its value is generally augmented, and simply because the productiveness of labour is generally increased in the country where we have supposed it is obtained; and what is more curious still, if gold and silver were to partake of this general improvement, their value would not be altered; because in such a case goods would obviously bear to each other the same relation as formerly. It is scarcely necessary to say, that supposing gold and silver remain the same, and all other commodities are increased in their producing labour, the effect upon general prices would be increased dearness, or a fall in the value of the precious metals.* But, in real truth, we do

* It will be observed, I have made no mention of the duties upon importation and bounties on exportation as affecting prices generally; and simply because the omission does not invalidate, whilst the ad-

not exclusively obtain our supply of gold from one part of the world merely; we obtain it from various parts. A general improvement or diminution in the means of production in the Southern part of the new world would not consequently have that effect upon general prices, which we have described under hypothetical circumstances. But, perhaps, upon a nice scrutiny, the results would not be very dissimilar. For, imagining labour to continue at its old productive rate in those other countries where part of our supply was obtained, whilst (excepting gold) it was so much improved in South America, the effect would probably be an abstraction of capital from the working of the mines in South America to those other employments which were assumed to be so much improved in productiveness, and this would cause an extra demand for gold in all other places, and would raise its price immediately and permanently; and consequently reduce commodities, unless mines of equal fertility could be obtained to supply the requisite demand. Should this be the case, the value of commodities would undergo no change, and the only effect would be our obtaining supplies from other places than South America, where we should be prevented from trading in them to the same extent as before.

mission might have embarrassed the argument. Whether such duties did exist or not, previous to the alterations in gold, which have been described, it does not affect the conclusion to which we have arrived; as I have assumed these duties, &c. to be stationary, if existing.

The doctrines disclosed in this section may be thus very briefly recapitulated.

That the supposition of an invariable standard of value does not involve any contradiction; on the contrary, that it is a very natural supposition.

That all the standards economists have hitherto proposed are nugatory, and would not in the least measure the variations in other things.

That as cost of production, meaning labour and the general productiveness of labour, is the cause of value; so any commodity invariable in its cause, would be a perfect measure of value for other things.

That if money is the standard, and produced in this country, the very supposition of it as an invariable standard, involves contradictory conditions.

That money as it is actually produced, may be a perfect standard of value in our country, during changes in the value of our goods, and that this supposition involves no contradictory conditions.

That to constitute it an invariable standard for any length of time, it must be invariable in its cost.

That the exact effect of a rise or fall of wages, an increase or decrease in the productiveness of labour in any country where we assume our supply of gold to be exclusively obtained, is curious and apparently paradoxical, but really defensible upon the common principles of economists.

SECTION VII.

Though in the last section Mr. Ricardo, in order to simplify his reasonings, supposed money to be invariable; he is occupied in this section in stating the possible variations in it from different quantities of labour being employed in its production; and states that a rise of wages from a fall of money will have no effect upon profits, while a rise of wages, from the circumstance of the labourer being more liberally rewarded, will certainly lower profits, Mr. Ricardo's notion, however, of the condition necessary to constitute money invariable in its value, is just as curious in this as in the previous sections of his chapter on value. The following passage occurs at p. 49:—"It is not by the absolute quantity of produce obtained by either class, that we can correctly judge of the rate of profit, rent, and wages, but by the quantity of labour required to obtain that produce. By improvements in machinery and agriculture, the whole produce may be doubled; but if wages, rent, and profit be also doubled, these three will bear the same proportions to one another as before, and neither could be said to have relatively varied. But if wages partook not of the whole of this increase—if they, in-

stead of being doubled, were only increased one-half; if rent, instead of being doubled, were only increased three-fourths, and the remaining increase went to profit, it would, I apprehend, be correct for me to say, that rent and wages had fallen while profits had risen; for if we had an invariable standard by which to measure the value of this produce, we should find that a less value had fallen to the class of labourers and landlords, and a greater to the class of capitalists, than had been given before. We might find, for example, that though the absolute quantity of commodities had been doubled, they were the produce of precisely the former quantity of labour. Of every hundred hats, coats, and quarters of corn produced, if

The labourers had before.	25
The landlords	25
And the capitalists	50
	100

And if, after these commodities were double the quantity, of every 100

The labourers had only	22
The landlords	22
And the capitalists	56
	100

In that case I should say, that wages and rent had fallen, and profits risen; though, in conse-

quence of the abundance of commodities, the quantity paid to the labourer and landlord would have increased in the proportion of 25 to 44. Wages are to be estimated by their real value, viz. by the quantity of labour and capital employed in producing them, and not by their nominal value, either in coats, hats, money, or corn. Under the circumstances I have just supposed, *commodities would have fallen to half their former value, and if money had not varied, to half their former price also.* If then in this medium, which had not varied in value, the wages of the labourer should be found to have fallen, it will not the less be a real fall, because they might furnish him with a greater quantity of cheap commodities than his former wages." Thus money, the standard, is supposed to remain invariable in its value, notwithstanding it has universally increased 100 per cent. in purchasing power. With what consistency, therefore, does Mr. Ricardo object to the Smithian theory of equivalent alterations in value to alterations in the wages of labour, when his own doctrine is liable to the same objection? Mr. Ricardo in the first section adopts Adam Smith's definition of value, viz. "a power of purchasing other goods." Can money, therefore, be supposed invariable in its value, when it purchases twice the amount of commodities at one time as at another? But his opinions respecting a standard are in perfect keeping, when he supposes, in the above passage, that the value of wages and rent may

fall notwithstanding their exchangeable value is increased in the proportion of 25 to 44. It is true Mr. Ricardo supposes the labour to produce the sum of commodities represented by 44 is less than that represented by 25, and were quantity of labour the cause of value, both wages and rent would be deteriorated in exchangeable worth; this, however, is not the case, as the supposition of it as a complete cause, opposes the plainest dictates of common sense, and involves the grossest contradictions. Mr. Senior, in his "Lectures on the cost of obtaining money," in a note, p. 102, animadverts upon the above passage. He observes—"According to this nomenclature, if one labourer were to receive 30*l.* a year, and the produce of his labour to sell at the end of the year for 40*l.*, and another were to receive 60*l.* a year, and the produce of his labour to sell for 100*l.*, the first labourer would be said to receive higher wages than the second; and if the wages of the second were to be altered from 60*l.* to 40*l.* a year, and the commodity to sell for 50*l.*, the alteration must be termed a rise of wages. According to this nomenclature, the wages of the best workmen are always the lowest, for it is known to be more profitable to employ them." But Mr. Ricardo imagined that if the producing labour of gold remained stationary, all kinds of commodities would alter in price just as their producing labour altered. Consequently when he supposed the labourer to receive, after the increased productiveness of industry, a sum equal

to 44 in commodities instead of 25, he imagined that the commodities represented by 44 had a less price than those represented by 25, and that money, in which he estimated price, had continued constant in its value. Though this is radically erroneous, it is a direct corollary from his doctrine. In the 1st section he supposed that quantity of labour was demonstrated to be the cause of value; hence as all commodities in the above passage were supposed to be produced by half their former labour, he considered they were reduced to half their former price; and as the quantity of labour to produce the commodities 44 was less than that which was previously necessary to produce the 25, he concluded naturally that wages had fallen. Consequently, he would not suppose the wages of the best workmen to be lower than other workmen, unless the quantity of labour necessary to produce their wages was lower than that necessary to produce the wages of the inferior workman. The enigmatical character of Mr. Ricardo's work arises from his using the terms value and wages in two senses. The confusion arising from this unjustifiable liberty, Mr. M'Culloch has attempted to obviate, but with what success he has obviated the difficulties attending Mr. Ricardo's use of the term value in two senses, I have endeavoured to shew in a previous section; and his introduction of the term *proportional* wages, has not freed him from many inconsistencies. It were well if the terms value and wages were

re-installed in their original meaning, and stript of the confusing adjuncts "real" and "proportional."

But Mr. Ricardo is correct when he says that "the variation in the value of money, however great, makes no difference in the rate of profits," because, though a man's gross amount of profits may vary by variations in the value of money, yet, as these variations do not disturb the ratio subsisting between capital and profits, they leave the *rate* unaffected.

I have thus brought to a close the critical examination of Mr. Ricardo and other economists' doctrines of value. It has been shewn what is the real principle which determines value in exchange; and to what inconsistencies and confusion the adjective "real" leads. It has also been shewn what effects changes in the wages of labour have upon value and profits under different proportions of fixed and circulating capital, &c. and the conditions necessary to a perfect standard of value. Many things of great practical importance follow from the principles which have been exhibited. To advert to them now would much exceed the limits of this work. Having, however, developed what I consider true principles, I submit them to public criticism; and should they stand this severe test, it will remain for others to pursue their consequences into various ramifications of the agricultural, manufacturing, and commercial system.

ERRATA.

Page 80, line 10. For "durability of Capital," read *Wear and Tear of Fixed Capital.*

..... 84, ... 33. For "durability of Capital," read *Wear and Tear of Fixed Capital.*

..... 96, ... 29. For "rise money," read *rise in money.*

..... 97, ... 17. For "produced, an imported," read *produced and imported.*

..... 12, ... 26. Dele , after the word designedly.

DIRECTIONS FOR PLACING THE TABLES.

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